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2011

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**Profiles of Elementary-Age English Language Learners
with Reading-Related Learning Disabilities (LD)
Identified as Speech and Language Impaired
Prior to, At, or After Identification as LD**

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Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

In Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

May, 2011

Dedication

This dissertation is dedicated to my husband, John, who was always so supportive and loving through this arduous process, to my son, Adrian, and to my dear, sweet mother. I love you all so much.

Acknowledgements

I would like to extend my gratitude to Dr. Alba Ortiz for her patience and encouragement during this endeavor. Through all the unexpected challenges that I encountered, she never wavered in her support or her confidence that I would successfully complete this chapter of my life. There were times when I thought that this dissertation was an elusive goal. Dr. Ortiz taught me that while there are challenges that cross your path and will veer you off track, one must remain steadfast in achieving one's goals. Thank you, Dr. Ortiz, for helping through this difficult journey.

I would also like to thank Drs. Cheryl Wilkinson, Phyllis Robertson, Shanna Smith, Jo Worthy, and Audrey Sorrells, members of my dissertation committee, for their advice and guidance. I appreciate the support provided by Marsha Tapley in the preparation of this manuscript. Finally, I would like to thank my family, friends, and the staff of the Department of Special Education for all their support.

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Belinda Maria Despujols McGhee, PhD

The University of Texas at Austin, 2011

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This study examined the characteristics of 14 English Language Learners classified as having learning disabilities (LD) who were also identified as having speech and language impairments (SI) prior to, at, or after initial identification as LD. Data were collected under the auspices of a longitudinal study, Bilingual Exceptional Students: Effective Practices for Oral Language and Reading Instruction, conducted by multicultural special education faculty at the University of Texas at Austin between 1999 and 2002. Participants were served in bilingual education and bilingual special education programs in a large, central Texas school District. Archival data from students' cumulative, bilingual and special education records were analyzed to profile student characteristics at the point of their initial LD and SI eligibility determinations. A clinical judgment panel comprised

of bilingual special education experts analyzed student data and made independent eligibility recommendations for each participant. These recommendations were compared to the multidisciplinary teams (MDTs') eligibility decisions. Findings revealed that MDTs based eligibility primary on the presence of an IQ-achievement discrepancy and did not adequately consider factors, other than the presence of LD that could explain student difficulties. When data other than the IQ-achievement discrepancy were considered, the clinical judgment panel classified 4 participants as LD and 9 as having disabilities other than LD; the panel felt that data for one student were insufficient to make an eligibility recommendation. Findings related to identification of SI for this population were limited because students were assessed using a Spanish translation of an English speech and language assessment developed by the district. Test results corroborated parents' and teachers' concerns that these students had significant communication problems. Implications for improving practices related to early intervention, referral, assessment, and eligibility determinations for ELLs are presented and suggestions for future research are delineated.

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CHAPTER ONE

Introduction

Learning disability (LD) is the most commonly identified disability in the United States (Rhodes, Ochoa & Ortiz, 2005; United States Department of Education [USDOE], 2006), and reading disabilities are the most common type of LD (Sattler, 2002). It is not surprising, then, that the majority of English Language Learners (ELLs) in special education programs are classified as having reading-related LD (Zehler, Fleishman, Hopstock, Pendzick & Stephenson, 2003). The second most common disability category in which ELLs are served is speech and language impairments (SI; Zehler et al., 2003). Many ELLs are dually classified as LD and SI (LD/SI; National Institute of Child Health and Human Development [NICHD], 2003). Yet, research on ELLs with reading-related LD is limited, as is research on ELLs with SI; research on ELLs with LD/SI is virtually non-existent (Liu, 2006). This study attempts to address these gaps in the research literature by examining the characteristics of Spanish-speaking ELLs with reading-related LD who were also identified as having speech and language disorders before, at the time of, or after they were classified as LD.

Background and Context for the Study

ELLs are students whose English skills are so limited that they cannot profit from instruction provided solely in English without accommodations (Ortiz & Kushner, 1997). Title IX of the No Child Left Behind Act (NCLB, 2001) refers to ELLs as "limited English proficient" (LEP) students and defines this population as students who have difficulties in speaking, reading, writing, or understanding the English language [(NCLB 2001, §

9101(25)]. This lack of English proficiency makes it difficult for them to succeed in classrooms where English is the language of instruction, to meet proficiency standards on state-mandated tests of achievement, and to participate fully in society.

Criteria for classification as ELL. Public school students between the ages of 3 and 21 qualify for special language program support, i.e., bilingual education or English as a second language (ESL) if they (a) were born outside the United States or have a native language other than English; (b) are a Native American, Alaskan Native, or a native resident of the outlying areas; (c) come from an environment where a language other than English has had a significant impact on their level of English language proficiency; and/or (d) are migratory and come from an environment where English is not the dominant language [(NCLB 2001, § 9101(25)]. Each state interprets the federal definition and establishes its own eligibility criteria for special language programs. For example, in Texas, students may be classified as ELLs if: (a) their English language skills are so limited, or disability so severe, that conducting formal assessments is not feasible; (b) their achievement score on a state-approved English proficiency test is below the levels established by the Texas Education Agency (TEA) as indicative of reasonable proficiency; (c) their primary language proficiency on an assessment approved by TEA is greater than the student's proficiency in English; or (d) the Language Proficiency Assessment Committee (LPAC), the group responsible for determining the academic needs of ELLs, qualifies the student based on other pertinent information (Texas Administrative Code [TAC § 29.056]). ELLs are typically served in bilingual education or ESL programs. Bilingual education students receive academic instruction in their native language and a

structured program of ESL instruction (Texas Education Code [TEC] § 29.055). The majority of ELLs are served in ESL programs (Zehler et al., 2003); they receive most of their instruction in a general education classroom and are provided instruction by an ESL teacher for a specified period of time.

ELL enrollments. The 2000 Census reported that nearly one out of every five people living in the United States spoke a language other than English at home. This linguistic diversity was reflected in U.S. public schools, where ELLs were enrolling at a rate 10 times higher than any other student group. By the year 2000, ELLs were represented in almost half of the nation's public schools (Kindler, 2002; Zehler et al., 2003); the native language of the majority (77%) was Spanish (Zehler et al., 2003). Every state in the nation served ELLs, from a low of 3,000 students in New Hampshire to a high of 1.6 million students in California. Sixty-one percent of ELLs resided in five states: California, Texas, Arizona, New Mexico and New York (U.S. Department of Education, 2002). More recent data indicated that by 2005-2006, approximately 5,074,572 students, or 10.3% of the students in pre-kindergarten through 12th grade, were identified as ELLs; approximately 40% of these students were enrolled in pre-kindergarten through third grade (National Clearinghouse for English Language Acquisition [NCELA], 2008).

Texas has 24.8 million residents, 48% of whom are European American, 37% Hispanic, and 12% African American (U.S. Census Bureau, 2008). Approximately 32% of Texas residents speak a language other than English at home. As is the case nationally, the linguistic and cultural diversity of the state is mirrored in school enrollments. Texas has the second highest concentration of ELLs in the nation (NCELA, 2006; TEA, 2006). The

number of ELLs has increased by 50% since 1998-1999 (U.S. Census Bureau, 2008). In 2008-2009, approximately 17% (n=800,554) of the 4,749,571 students enrolled in Texas schools were ELLs. The overwhelming majority of Texas' ELLs, 93%, are Hispanic (TEA, 2010 b).

Academic achievement of ELLs. NCLB (2001) made improving the achievement of all students a national priority and imposed an accountability system that includes annual assessments of reading and mathematics for all students in third through eighth grade (USDOE, 2006). However, current federal and state policies governing the implementation of NCLB have been ineffective in narrowing the substantial achievement gap between ELLs and native-English speakers (Liu, 2006; Liu, Ortiz, Wilkinson, Robertson, & Kushner 2008; McCardle, Mele-McCarthy, Cutting, Leos, & D'Emilio, 2005; Ortiz & Maldonado-Colon, 1986; Wilkinson, Ortiz, Robertson, & Kushner, 2006). A national survey of schools that served at least one ELL (Zehler et al., 2003) found that 56% of ELLs in third grade performed below grade level in math and that 76% scored below grade level on tests of English reading. According to the National Center for Educational Statistics (NCES, 2005), ELLs across grades were twice as likely as their English proficient peers to be reading below grade level.

The reading achievement of Spanish-speaking ELLs in Texas is below that of White peers. For example, in spring, 2006, the majority of ELLs in grades three to six took the English version of the state reading achievement test and attained an average passing rate of 55%. This was 37 percentage points lower than the 92% average passing rate for Whites (TEA, 2006). ELLs who took the Spanish reading test at these grade levels fared

much better, averaging a 72% passing rate; however, this was still 20 percentage points lower than that of White students (TEA, 2006).

ELLs in special education. Low academic achievement and reading-related difficulties are associated with significant, negative consequences. For example, students with reading problems and ELLs are the student groups most likely to be retained (National Association of School Psychologists [NASP], 2003). Although intended to improve student performance, retention leads to poorer academic achievement and increases the likelihood that students will drop out of school (NASP, 2003; Thompson & Cunningham, 2000). Low academic achievement and reading-related difficulties are also the primary reasons for referrals of ELLs to special education (McCardle et al., 2005).

Disproportionate representation, “the unequal proportions of culturally diverse students in special education programs” (Artiles & Trent, 2000, p.514), and the disproportionate representation of ELLs are long-standing issues in the field of special education (Artiles & Trent, 2000; Klingner & Harry, 2006; Orosco, Schonewise, Onis, Klingner & Hoover, 2008; Ortiz & Yates, 1983; Robertson, Kushner, Starks & Drescher, 1994). According to a national study of services provided ELLs in special education (Zehler, et al., 2003), in 2001-2002, approximately nine percent of ELLs were served in special education programs. However, of the 9% approximately 5% were classified as LD and 2% as SI, suggesting over-representation in these two categories and under-representation in the others. Spanish-speakers represented 84% of all ELLs with disabilities.

ELLs with learning disabilities. Under the Individuals with Disabilities Education Improvement Act (IDEIA, 1997; 2004), a specific learning disability is:

A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell or to do mathematical calculations. It includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia [IDEA Regulation § 602(30)(A)].

Each state establishes specific criteria classifying students as LD. Historically, most states have used a criterion-based formula or one based on a significant discrepancy between intelligence and achievement (Hallahan & Mock, 2003). Regardless of the criteria, though, federal policy incorporates what is popularly referred to as an "exclusionary clause." That is, students may not be classified as LD if their academic difficulties can be primarily attributed to cultural, environmental or socio-economic differences, limited English proficiency (IDEA, 1997, 34 Codified Federal Regulation [(C.F.R.) § 300.307 (c)(10)ii; IDEA 2004] or to the lack of appropriate instruction in basic reading, reading comprehension or math [IDEA, 2004, 34 C.F.R. § 300.306(b)(1)(ii); TAC § 89.1040 (c)(9)(A)].

Learning disability is the most prevalent disability category across racial and ethnic groups. Approximately 5% of public school students ages 6-21 were identified as LD in 2004; 46% of students in special education were served in the LD category (U. S.

Department of Education, 2006). According to Zehler and colleagues (2003), approximately 56% of ELLs in special education are identified as LD.

Speech and language impairment. Children classified as having speech and language impairments (SI) have problems with articulation (e.g., mispronunciation of sounds or words, incoherent or unintelligible speech) and/or delays in language development [IDEA, 1997, 2004; C.F.R. § 300.7 (c)(8)]. Students with SI in their native language may have trouble retaining and repeating information, limited spontaneous speech, limited vocabulary, word finding difficulties, errors in syntax and grammar, and/or difficulty using language appropriately in social situations (Bedore & Pena, 2008; Haynes, Moran & Pindzola, 1990). In addition to articulation and language problems, students may also be identified as SI because of a fluency disorder such as stuttering, or voice disorders which include abnormalities in the quality, pitch and loudness [IDEA 1997, 2004; 34 CFR § 300.7 (c)(11)]. SI may be caused by neurological disorders, hearing impairments, mental retardation or physical impairments such as cleft palate (Bowen, 1998). However, the cause of communication difficulties is often unknown (Schoenbrodt, Kumin & Sloan, 1997). Students with SI do not qualify for special education services unless the disability has an adverse effect on educational performance creating a need for specially designed instruction [IDEA 1997, 2004; 34 CFR § 300.7 (b)(2)].

Nationally, approximately 19% of students ages 6 through 21 in special education were served in the SI category in 2004 (U.S. Department of Education, 2009). According to Zehler and colleagues (2003), approximately 83,982 ELLs in K-12 were identified as speech or language impaired in 2001-2002. This represented almost one-fourth of ELLs

with disabilities, a proportion considerably higher than national prevalence rates for this category.

Field Initiated Study of ELLs with Reading-related Learning Disabilities

The changing demography, as well as the dramatically increasing ELL population, create an urgent need for researchers to address school district practices related to identification, early intervention, referral, assessment, and eligibility determinations for ELLs identified as LD and SI. The study presented here attempts to contribute to the research literature by examining the characteristics of students with reading-related disabilities who have also been classified as having speech and language impairments. The study involves a subset of data from The University of Texas at Austin Field Initiated Study (FIS), *Bilingual Exceptional Students: Effective Practices for Oral Language and Reading Instruction*¹ (1999-2002), funded by the U.S. Office of Special Education and Rehabilitative Services (Wilkinson et al., 2006).

One component of the FIS was to develop profiles of Spanish-speaking ELLs ($N=70$) in a central Texas school district who were receiving reading instruction in bilingual special education classrooms. However, preliminary analyses of FIS data revealed wide variation in student characteristics at initial entry into special education. For example, some children were initially identified as LD with no secondary disabilities (LD only), while others initially qualified for early childhood special education services and were later classified as LD. Still others qualified as having LD and SI at initial entry into special education. These variations in initial classifications prompted FIS researchers to analyze data by subgroups of LD students. Wilkinson and colleagues (2006) analyzed

results for the group identified as LD only and Liu (2006; Liu, et al., 2008) described the characteristics of ELLs who initially qualified for early childhood special education services who were later classified as LD. The study reported here involved FIS participants with reading-related LD who had been identified as having SI before, at the same time as, or after being identified as LD. To provide the context for this latter study, the Wilkinson et al. (2006) and Liu, et al. (2006; 2008) are summarized briefly in the next section.

By way of preface, it is important to note that general and special education policy and practice have changed somewhat since the completion of the FIS. The reauthorization of IDEA (2004) now allows LD identification to be based on documentation of student response to academic and behavioral interventions provided in the context of general education [(IDEA Regulations; 34 CFR § 300.307(a)(2)], an approach referred to as "response to intervention" (IDEA 2004). However, the FIS was conducted prior to the 2004 reauthorization so student identification was governed by the 1997 IDEA policies and procedures. At the time of the FIS, student eligibility for LD services was based primarily on an IQ-achievement discrepancy formula. To qualify, students' test results had to document a severe discrepancy between intellectual ability and achievement in oral expression, listening comprehension, basic reading, reading comprehension, written expression, math calculation, or math reasoning. This intelligence-achievement discrepancy model has been in use for more than 30 years (Hallahan & Mock, 2003) and has been the most widely used method for qualifying students as LD in the U.S. (Rhodes et al., 2005).

In Texas, to qualify a student as LD, assessment results had to show that the student's IQ was above the range for mental retardation (IQ score of 70 or above) on a standardized IQ measure [TEA (2006); 19 TAC § 89.1040 (a)(9)]. Qualification for services under the reading-related LD category required a discrepancy of 16 points or more between intelligence and achievement in basic reading (decoding text) and/or reading comprehension (text comprehension).

ELLs with Reading-related LD

Under the auspices of the FIS, Wilkinson, Ortiz, Robertson, and Kushner (2006) conducted an exploratory study of eligibility decisions made for 21 Spanish-speaking ELLs with LD and no secondary disabilities. These students were provided special education instruction in the area of reading. Archival data were gathered from the participating district's cumulative, special education, and bilingual education records. These data included school histories, bilingual education eligibility (e.g., language proficiency and academic achievement), and special education referral, assessment, and placement information. Three quarters of the participants (16 of 21) had been referred to special education in second or third grade. Of the reasons given for student referral, 66% indicated reading difficulties and 28% expressed general concerns with academic progress (e.g., below grade level or not progressing).

All students were tested using intelligence and achievement tests. The majority of students (n=18; 86%) were assessed using the *Comprehensive Test of Nonverbal Intelligence* (CTONI; Hammill, Pearson, & Wiederholt, 1996), the Nonverbal Scale of the *Kaufman Assessment Battery for Children* (K-ABC; Kaufman & Kaufman, 1983) or the

Test of Nonverbal Intelligence–2 (TONI-2; Brown, Sherbenou, & Johnson, 1990). The others were tested using the *Wechsler Intelligence Scale for Children, Third Edition* (WISC-III; Wechsler, 1991). The achievement of 16 students (76%) was assessed using the *Batería Woodcock-Muñoz: Pruebas de Aprovechamiento–Revisada* (Woodcock & Muñoz-Sandoval, 1996); the remaining students were assessed using a combination of the *Woodcock Language Proficiency Battery–Revised* (Woodcock & Muñoz-Sandoval, 1995) and the Math subtest of the *Batería Woodcock Psicoeducativa en Español* (Woodcock, 1982). Achievement in English was assessed using the *Woodcock-Johnson Psychoeducational Battery–Revised* (Woodcock & Johnson, 1990).

Of the 18 students tested using nonverbal IQ tests, eight (44%) achieved standard scores between 90 and 99, eight (44%) scored below 90, and two students (11%) had a score of 100 or higher. Results of the two Woodcock batteries administered in Spanish indicated that the majority of students were below grade level in basic reading and broad reading. All students were found to be eligible for special education based on a discrepancy of 16 or more points between intelligence and achievement. This discrepancy appeared to be the basis for all eligibility determinations made by the district's MDTs.

Expert panel review. Student data collected by the school district were reviewed by three university-level bilingual special education faculty with expertise specific to Spanish-speaking ELLs with LD. One of the panelists had a PhD in school psychology and the other two had PhDs in special education administration. The panelists averaged 19 years of experience in the bilingual special education field (range = 13–27 years). After reviewing student records, each panel member rendered an independent eligibility

determination for each of the participants and provided a rationale for the recommendation. Decisions were unanimous for 13 students (62%). The panel met and discussed the other eight cases to reach a consensus decision about eligibility.

The panel agreed that some students appeared to have reading-related LD ($n=5$) but also identified students that they believed had disabilities, but not necessarily reading-related LD ($n=6$). Another group of students ($n=10$) had learning problems that the panel believed could be attributed to factors other than LD or for whom substantive additional data would be required to validate eligibility.

ELLs with reading-related LD. Students whom the panel classified as having reading-related LD ($n=5$) had significant IQ–achievement discrepancies documented in their Full and Individual Evaluations (FIEs). Data from multiple sources verified that students had reading difficulties manifested over time. Despite continuous enrollment in school, students' achievement scores in Spanish reading were substantially below grade level. Students had received specialized interventions in the context of general education (e.g., remedial reading or tutorial services), but these had not resolved reading difficulties. The results of the FIEs substantiated the concerns of referring teachers and frequently corroborated the concerns noted by previous teachers in student records. Moreover, teachers described student behaviors that are commonly associated with LD (e.g., poor fine motor skills, disorganization, inability to work independently). A majority of students' parents reported similar problems at home. The expert panel believed that when considered together, data from multiple sources were sufficient to rule out factors other than the presence of a learning disability as the cause of students' school-related problems.

Students with disabilities other than LD. The expert panel agreed with district multidisciplinary teams (MDTs) that six students had disabilities, but questioned the classification of students as LD. In two instances, students had experienced head traumas, but records did not provide evidence of medical attention; in another case, the student qualified for classification in math, but not reading, LD. In two cases, the panelist felt that a classification other than LD was more appropriate; a speech-language evaluation had been requested for one of these students, but had not been conducted, leaving open the possibility that problems were an artifact of communication difficulties. In the other case, the student had been referred due to both academic and behavioral concerns, the FIE documented significant IQ–achievement discrepancies, and behavior problems were reported by both the teacher and the child's parents. However, data were insufficient to determine that LD was a more appropriate classification than emotional or behavior disorder. The authors did not present information on the sixth student.

Students whom the expert panel did not qualify for special education. The panel did not qualify 10 students (48% of total sample) as eligible for special education. Panel members felt that available data were insufficient to conclude that assessment personnel and MDTs had the necessary evidence to rule out cultural, environmental or socio-economic differences as the cause of students' difficulties [IDEA 1997; 34 CFR § 300.7 (c)(10)(ii)]. Moreover, documentation was insufficient to conclude that early intervention services provided six of the students (60%) had been adequate to address presenting problems; in two instances, the interventions appeared to be successful, but the student was referred anyway. FIE results for six students (60% of this group) included a barely

significant discrepancy (16 to 20 points) in one area, with all other scores at or above grade level or commensurate with IQ. In three other cases, assessment results were inconsistent with the reason for referral.

ELLs with LD Identified in Early Childhood

Liu, Ortiz, Wilkinson, Robertson, and Kushner (2008) reported results of eligibility decisions made for 19 Spanish-speaking English language learners (ELLs) in the FIS sample. These students had been initially identified as eligible for special education at three, four, or five years of age; and were receiving reading instruction in a BSE classroom at the initiation of the Field Initiated Study. Liu et al. (2006; 2008) followed the same procedures as those used in the study by Wilkinson and colleagues (2006). FIEs revealed that only nine of the 19 participants demonstrated significant IQ–achievement discrepancies, the Texas criterion for classification as LD, in the area of reading. Because the purpose of the study was to describe characteristics of ELLs with reading-related learning disabilities, these nine students became the focus of analyses.

Student assessment. Participants’ speech and language evaluations will first be described, followed by a description of their reading-related LD evaluations.

Speech and language evaluations. Initial speech-language evaluations for students had been conducted in Spanish using an instrument developed by the school district. This instrument was a direct translation of the English version used by the district’s speech pathologists; neither version was normed. At initial special education placement, eight students were classified as having language disorders in the moderate to severe range; one student also had an articulation disorder. The ninth student had a

moderate rhythm disorder. Teachers indicated they were referring students for further evaluation “to establish eligibility for special education services,” but they provided no specific information as to why they suspected the presence of LD.

Assessment of intelligence and achievement. All students were assessed in Spanish; the achievement of one student was also assessed in English. The majority of students ($n=6$; 67%) were assessed using the *CTONI* (Hammill, Pearson, & Wiederholt, 1996). Two students were assessed using the *WISC-III* (Wechsler, 1991) and one was assessed using the *Kaufman Assessment Battery for Children* (K-ABC; Kaufman & Kaufman, 1983). The achievement of six students was assessed using the *Batería Woodcock-Muñoz: Pruebas de Aprovechamiento–Revisada* (Woodcock & Muñoz-Sandoval, 1996); the achievement of the remaining three was assessed using the *Woodcock Language Proficiency Battery–Revised* (Woodcock & Muñoz-Sandoval, 1995). IQ scores ranged from 74 to 104, with a mean of 86 (low average). Discrepancies between intelligence and achievement were indicated in broad reading, letter and word identification, passage comprehension, and basic reading. These ranged from 16 to 54 points; in several instances, discrepancies were barely significant.

Expert panel review. The expert panel involved in the Wilkinson, et al. (2006) study also examined data from students’ school records, following the procedures described previously. Panelists concluded that one student had reading-related LD, three had disabilities other than LD, and five had problems that could be explained by other factors. The descriptions of students in each of these categories were similar to those presented by Wilkinson and colleagues.

ELLs with reading-related LD. The one student the panel qualified as having reading-related LD had an IQ of 104 and exhibited an IQ-achievement discrepancy of 41 points in the area of reading comprehension. Records indicated that he had been socially promoted to both first and second grades, evidence that he had not met achievement standards. The student had been provided a literacy support program, but continued to experience academic difficulties. He also demonstrated letter reversals, short attention span, poor organizational skills, and had difficulty working independently, all characteristics associated with LD (Liu et al., 2008).

Students with disabilities for whom the panel questioned an LD classification.

The expert panel agreed with district MDTs that three students had disabilities, but questioned the LD classification. Confounding factors (e.g., reported head injury, problems at birth, and nutritional issues) suggested the presence of other disabilities such as attention deficit hyperactive disorder, other health impairments, mental retardation, or traumatic brain injury. The eligibility determination was further complicated by questionable assessment practices (e.g., testing only in Spanish even though records indicated the student was English dominant), and failure to consider significant life events (e.g., separation from parent and health and nutrition issues) as factors influencing performance.

Characteristics of students whom the panel did not qualify for special education.

The expert panel concluded that data for five students were insufficient to qualify them for special education, primarily because of questionable assessment procedures and data suggesting that presenting problems might be attributed to significant life events.

Concerns about assessment procedures and results included assessment of students only in Spanish, even though data suggested they had some knowledge of English, using an IQ test for which there is no known translation in Spanish, and inconsistencies between reasons for referral and assessment outcomes. In one instance, the assessor indicated that the student's adaptive behavior was consistent with the measured IQ of 76 even though no formal measure of adaptive behavior had been conducted. In this case, the panel felt data were insufficient to make an eligibility determination. In some instances, data were insufficient to determine whether interventions had been provided to address such issues as child abuse, death of a sibling, serious illness, or high mobility.

Statement of the Problem

Documenting disproportionate representation is a complex issue, and data on participation rates are often misleading because representation is influenced by many factors including race and ethnicity, socioeconomic status, geographic region, differences in disability definitions, eligibility criteria and data collection methods (Donovan and Cross, 2002; Robertson et al., 1994). In addition, unique factors contribute to the variance in special education placement rates for ELLs, including levels of native language and English proficiency, and the type of English language support program in which students are enrolled. For example, Artiles, Rueda, Salazar and Higadera (2005) examined special education placement patterns for ELLs in 11 school districts in California. They found that ELLs with disabilities were underrepresented in the early elementary grades and overrepresented in the middle and high school grades. ELLs with limited proficiency in both English and Spanish, and those who received the least language support (i.e., those in

English immersion programs), were at higher risk of being referred and placed in special education.

Accurately identifying disabilities among ELLs is complicated by other factors including the lack of appropriate assessment tools for this population, the shortage of staff with expertise specific to the education of linguistically and culturally diverse students, and the limited guidance provided by federal and state policies regarding the design and implementation of appropriate early intervention, referral, assessment, and eligibility determination practices for ELLs (Ortiz, 2002; Wilkinson et al., 2006; Zehler et al., 2003). These limitations have serious consequences. For example, teachers are unprepared to differentiate instruction, or may fail to implement recommendations made by intervention assistance teams to meet the needs of struggling learners in their classrooms, increasing the likelihood of referral to special education (Conway, Christensen, Russell, & Brown, 2000). Teachers and referral committees have difficulty differentiating between underachievement that may be attributed to inappropriate instruction, prior learning experiences, poverty, and language differences versus difficulties resulting from the presence of LD (Liu et al., 2008; Ortiz & Yates, 2002; Ramirez, 2000; Rhodes et al., 2005; Rodriguez & Carrasquillo, 1997; Valdez & Figueroa, 1994; Wilkinson et al., 2006).

Special education assessment personnel are often forced to rely on standardized instruments that are not normed on ELLs, are normed on monolingual speakers of other languages, rather than on bilingual individuals, and/or that involve translations or adaptations of instruments, all practices discouraged in the literature (Figueroa, 2002; Ortiz, 2002). Without appropriate assessment data, assessment personnel and MDTs have

difficulty distinguishing between ELLs who have reading-related LD and those who are struggling because of factors such as limited English proficiency and cultural differences (Klingner, Artiles & Barletta, 2006, Klingner et al., 2008; Liu et al., 2008; Ortiz & Polyzoi, 1986; Wilkinson et al., 2006).

Educators are tasked with assuring that students develop the ability to communicate effectively and that they acquire effective literacy and content skills. The low academic performance of ELLs suggests that educators have been unable to achieve these goals. This may be due, in part, to the fact that research on the functional language skills of culturally and linguistically diverse students, including ELLs, is sparse in comparison to the robust literature on speech and language development of monolingual English speakers (Brice & Brice 2006). Moreover, research has only recently become focused on the intersection of language proficiency and reading for ELLs (McCardle et al., 2005). The paucity of research in these arenas makes it difficult to design effective language and literacy instruction for ELLs and/or to design effective interventions for ELLs experiencing language- and literacy-related difficulties. This difficulty is exacerbated when ELLs are identified as SI, LD, or LD/SI.

This study involves analysis of data for a third subgroup from the FIS sample: 14 elementary-age, Spanish-speaking ELLs receiving reading instruction in a bilingual special education classroom, who were identified as having SI prior to ($n=5$), at the time of ($n=6$), or after ($n=4$) initial identification as reading-related LD. The following questions guided the study:

1. What were the characteristics of elementary-age Spanish-speaking ELLs when they were initially identified as having reading-related learning disabilities by the participating district's multidisciplinary teams (MDTs)?

- a. What were their demographic characteristics?
- b. Why were they referred?
- c. How were they assessed?
- d. What were their assessment results?
- e. What was the nature of students' reading-related LD as determined by MDTs?

2. How did the clinical judgments of an expert panel regarding students' eligibility as having reading-related LD compare with the eligibility determinations of the participating district's MDTs?

3. What were the speech and language characteristics of the elementary-age Spanish-speaking ELLs when they were initially identified as SI by the participating district's MDTs?

- a. What were their demographic characteristics?
- b. Why were they referred?
- c. How were they assessed?
- d. What were the assessment results?
- e. What was the nature of each student's speech and/or language impairment(s)?

Significance of the Problem

Results of the Wilkinson et al. (2006) and the Liu et al. (2008) study provide ample evidence that early intervention, referral, and assessment practices must be adapted to better distinguish between ELLs who experience significant achievement difficulties because of environmental and contextual factors and ELLs with LD. While many of the issues identified in the two studies were similar (e.g., questionable assessment practices, inadequate general education interventions for struggling learners, and failure to consider how significant life events contributed to presenting problems), there were important differences. In the Liu et al. (2008) study, children were initially identified as having speech and language impairments based on a speech/language assessment that was a direct translation of an English instrument; this practice made it impossible to determine whether the students had disabilities at all. Despite this, six participants received reading instruction in a BSE resource room *prior to LD assessments*. For these students, MDTs seemed to be projecting that students would have difficulty learning to read and, rather than waiting for the difficulty to be confirmed by general education teachers, used special education as early intervention. This included four of the five students the expert panel did not classify as having disabilities. The findings of these two studies confirm that ELLs with learning disabilities, as well as students with SI, are heterogeneous groups; this heterogeneity makes it difficult to distinguish ELLs with LD and/or SI from ELLs who are struggling academically for reasons other than the presence of a disability.

Results of the study reported here may contribute additional information that will

help teachers, referral committees, assessment personnel, and MDTs distinguish among ELL/LD subgroups more effectively. The student profiles that will be generated will provide important information on how ELLs classified as LD/SI differ from those with LD only and from ELLs with LD identified in early childhood. This is significant in that the literature provides scant information about ELLs who are dually classified as LD and SI. The information may also be useful in addressing disproportionality, both in terms of over- and under-representation of ELLs in special education. Given the multiple data sources used in this study, including school history, early intervention, referral, and assessment records, strategies for aggregating such data to develop a comprehensive picture of ELLs being considered for special education placement will be offered. Finally, the study will yield recommendations for improving policy and practice related to early intervention, referral, assessment, and special education eligibility for ELLs with reading-related LD, including those who also have speech and language impairments.

CHAPTER TWO

Literature Review

While the literature speaks extensively about the complexities of distinguishing language and learning differences from disabilities, it provides little insight into the characteristics of English Language Learners (ELLs) with reading difficulties who have been identified as having learning disabilities (LD) or speech and language impairments (SI). Research on ELLs who are dually classified as having reading-related LD as well as SI is virtually non-existent. To address these gaps in the literature, this study was designed to describe the characteristics of elementary-age Spanish-speaking English language learners with reading-related learning disabilities. Participants were also classified, or had been classified, as having speech and language impairments by school district multidisciplinary teams (MDTs). The study builds on the work of Wilkinson and colleagues (Wilkinson, Ortiz, Robertson, & Kushner, 2006) who documented the characteristics of ELLs with reading-related learning disabilities and that of Liu (2006) who profiled ELLs with LD who were initially classified as having disabilities in early childhood.

Eligibility for Bilingual Education and Special Education Programs

All of the participants in this study were being served in both bilingual education and special education programs. To provide the context for the study, a brief overview of Texas policies and practices that must be followed to qualify students for these programs follows.

Bilingual Education Policies

ELLs are enrolled in special language programs so they can acquire the English skills they need to succeed in school (Texas Administrative Code [TAC] §89.1225). Students in bilingual education programs receive basic skill instruction in the primary language along with carefully structured and sequenced English as a second language (ESL) lessons (Texas Education Code § 29.055). Classes are typically self-contained, although students may be integrated with English-speaking peers for subjects such as music and art (Freeman & Freeman, 1998). In ESL programs, teachers trained in second language acquisition and ESL strategies provide instruction designed to help students master social and academic English (TAC §29.055). ESL students often receive ESL instruction on a pull-out basis, for an hour or two a day; they spend the remainder of the school day in the general education classroom (Ovando, 2000).

In Texas, school districts must offer a bilingual education program, kindergarten through the elementary grades, if they have an enrollment of 20 or more ELLs, in the same grade, who speak the same native language [TEC § 29.053 (d)]. Districts may use multi-age or multi-grade groupings to meet the enrollment requirement. Although there are a variety of bilingual education model, all participants in this study were in transitional bilingual education (TBE) classrooms.

TBE is the most common dual language program implemented in the U.S. (Freeman & Freeman, 1998); it is also the most common bilingual education model in Texas (TEA, 2002). In the participating district, transitional bilingual education programs were available from pre-K through 5th grade or 6th grade, depending on the grade span

served by the particular campus. The goal of TBE is to develop children's native language skills as well as their English proficiency. The amount of English instruction is increased over time as students acquire higher levels of English proficiency (Freeman & Freeman, 1998). When they are ready to exit the program, students are typically receiving most of their instruction in English.

Language Proficiency Assessment Committee. Decisions about student eligibility for special language programs are made by the Language Proficiency Assessment Committee (LPAC). The LPAC is composed of a bilingual education teacher, an ESL teacher, a parent of an ELL, and a campus administrator (TEC § 29.063). The committee's responsibilities include identifying and evaluating student language proficiency and determining eligibility for entry into, continuing enrollment in, and exit from special language programs. The LPAC also recommends the program, (bilingual education or ESL), that will best meet the needs of individual students [TAC 89.1220 (e)(f)].

Identification and entry. Every school district in Texas is required to conduct a Home Language Survey (HLS) to determine whether a language other than English is spoken in the home. If it is, students are assessed using a state approved oral language proficiency test in the primary language and in English (TAC §89.1225 (a) (b)]. Students in pre-kindergarten, kindergarten, and first grade qualify for bilingual education if they have limited English oral language skills; those in second through 12th grade are eligible if oral language tests indicate they are not proficient English language speakers and/or if they

score below the 40th percentile on a state approved test of reading and writing (TEC § 29.056).

Exit criteria. At the end of every school year, each student's language proficiency and achievement are reevaluated. The results of these assessments are used to determine whether the student continues to meet eligibility requirements. Students are exited from bilingual education when language assessments indicate that they are English proficient; if they score at the 40th percentile or higher on the reading and language arts portion of a norm-referenced standardized achievement test, or if they meet state performance standards on the English reading and writing portions of the Texas Assessment of Academic Skills (TEC § 29.063).

The LPAC monitors the academic progress of exited students for two years. If a student who was previously classified as an ELL earns a failing grade and is considered to have inadequate English language proficiency and/or achievement, the LPAC may choose to re-enroll the student in a bilingual education or ESL program [TEC § 29.0561(a)]. To do so, the committee must document the basis for the conclusion that the student is failing because s/he has not acquired the English language proficiency necessary for success in classrooms taught entirely in English [TEC § 29.0561(c)].

Special Education Policies

Special education is provided to students identified as having disabilities and documented educational needs (Ortiz & Yates, 2002). Procedures required for referral, assessment, eligibility determinations, and educational placements are briefly summarized here. The procedures described were those in place at the time this study was conducted.

Referral. Students may be referred to special education if they do not appear to be developing at the same rate as other children and/or are experiencing prolonged academic and/or behavioral difficulties (19 TAC § 89.1011). Before requesting a special education evaluation, students should be considered for general education support services, such as tutoring, instruction provided by reading specialists, counseling, and any other academic and behavioral support services that are available to students in general education (19 TAC § 89.1011). If the student continues to experience difficulty in the general education classroom despite alternative general education programs or interventions, a referral for a Full and Individual Evaluation (FIE) may be initiated by the parent, teacher, or any other person involved in the education or care of the child.

Most schools use referral committees to determine whether there is sufficient information available to support a request for an FIE (Wilkinson, et al., 2006). Although membership is not mandated by policy or law, these committees often include an administrator, general and special education teachers, other school personnel (e.g., counselor or nurse), and the child's parents (Rhodes, Ochoa & Ortiz, 2005). After reviewing the reason(s) for referral and available school and home data, the committee decides whether there are factors, other than the presence of a disability, that might explain presenting problems. If there are not, the committee determines whether any other interventions or programs should be attempted before an FIE is conducted.

Notice of parental rights. Before an FIE can be conducted, parents must give informed, written consent. Requests for consent must be provided in the native language of the parent at least five days prior to the proposed evaluation (19 TAC § 89.1015). The

consent requirement is a safeguard intended to assure that parents understand the purpose of the evaluation and all relevant activities for which consent is being requested. Parents must be told that their consent is voluntary and may be revoked at any time.

Full and Individual Evaluation. The school district must complete the FIE within 60 calendar days of parents' initial consent for evaluation. The purpose of the evaluation is to generate data to establish whether or not the child meets the federal definition of a child with a disability (TEA, 2010 a). The FIE must include assessment of the child's health, vision, hearing, motor abilities, language dominance, general intelligence and academic or behavioral performance [19 TAC § 89.1040 (b)]. Assessments appropriate to the suspected disability must also be conducted.

Assessment for specific learning disabilities. To qualify a student as LD, FIE data must document that learning experiences appropriate for the student's age and ability level have been provided, but that, despite this, the student does not achieve commensurate with his or her age and ability levels [19 TAC 89.1040 (c) (2)]. This documentation includes a classroom observation conducted by someone other than the student's general education teacher.

At the time of this study, students referred for LD were typically assessed using intelligence and achievement tests to determine whether a severe discrepancy existed between achievement and intellectual ability in one or more of the following areas: oral expression, listening comprehension, basic reading skills, reading comprehension, mathematics calculations and/or mathematics reasoning. A severe discrepancy between ability and achievement may not be the result of a visual, hearing or motor impairment,

mental retardation, emotional disturbance or environmental, cultural or economic disadvantage [TAC 89.1040 (c) (9) (A)]. Children who do not meet the discrepancy criterion, but who appear to have LD, may still qualify for services under “Method II” [TAC 89.1040 (c) (9) (B)]. Under Method II, the multidisciplinary team can present alternative data to support their position that a severe discrepancy exists, even though it is not substantiated by the FIE. The MDT may also qualify a student based on alternative evidence if appropriate instruments for testing the student are unavailable [TAC 89.1040 (c) (9) (B)].

Assessment for speech and language impairment. The Texas Education Code uses the federal criteria, [34 Code of Federal Regulations (CFR), §300.8(c)(11)] to establish eligibility for services under the category of speech and language impairments. To qualify under Texas law, students must have a voice, rhythm, speech, and/or a language disorder that adversely affects their educational performance and that cannot be addressed without special education services. Students referred for SI must be evaluated by a certified speech and hearing therapist, a certified speech and language therapist, or by a licensed speech and language pathologist [(TEC §89.1040 (c) (10)]. TEA does not mandate specific assessments that must be administered for eligibility.

Multidisciplinary teams. Eligibility decisions are made by a multidisciplinary team (referred to as the Admission, Review, and Dismissal Committee in Texas). The MDT includes the parents and a group of qualified professionals, defined as a general and a special education teacher, an administrator, and a person qualified to conduct and interpret the FIE. The MDT may include other individuals who can contribute relevant information

about the child (e.g., physician, psychologist, social worker) or who can assist and provide support to parents in making informed decisions about their child (e.g., child advocate, legal counsel). If the student being considered is an ELL, a member of the LPAC must be part of the MDT to assure that language and cultural issues are considered in the eligibility determination (19 TAC § 89.1050).

Eligibility determination. The MDTs meet within 30 calendar days from the date of the FIE to discuss whether the student meets eligibility criteria for special education [19 TAC § 89.1050 (4) (d)]. Not all struggling learners have a disability. The definition of disability is two-pronged. In addition to meeting the criteria for one of the federal disability categories, the child must also have documented educational needs that can only be addressed with specialized services provided by special education programs (TEC § 300.306). If the committee determines that problems are primarily due to a lack of appropriate instruction, limited English proficiency or other factors (e.g., dialect), the student does not qualify for special education (TEA, 2010 a).

Individualized education programs (IEP). IEPs are developed for students who qualify for services. Measurable annual goals are established, as are procedures for documenting progress in the general and special education curricula (19 TAC §89.1055). Dates, frequency and duration of services to be provided are specified and the least restrictive instructional placement is selected. Parental consent is required before special education services can be provided for the first time (19 TAC §89.1045).

Annual reviews. An annual review is completed each year by an MDT to determine continued eligibility for special education services, to examine progress in

relation to annual goals and objectives, and to update the IEP, as appropriate. If necessary, the MDT may request additional evaluations. If data indicate that the child is no longer eligible, the MDT dismisses the student from special education (19 TAC § 89.1050)

Prevention and Early Intervention

To address disproportionate representation of ELLs in special education, schools and districts must offer programs designed to increase the likelihood that ELLs will succeed in school (Ortiz, 2002; Ortiz & Yates, 2002). They must also provide effective early intervention programs to support struggling learners. If general education cannot meet the needs of students, and a referral is initiated, the processes used to determine whether the student qualifies for special education must be linguistically and culturally appropriate. For example, FIEs are nondiscriminatory, MDTs include individuals with expertise specific to the education of ELLs, and team members are trained to distinguish linguistic and cultural differences from disabilities (Ortiz & Yates, 2002).

Data on the achievement of ELLs and special education representation patterns (refer to Chapter 1) suggest that existing programs and services do not meet the needs of these students. In the sections that follow, factors contributing to school failure are discussed, as are recommendations for improving programs and services and for removing barriers to implementation of effective programs and recommended practices.

Prevention of School Failure

Prevention of school failure requires a culturally responsive and supportive environment that is conducive to learning and motivates positive school behavior (Ortiz et al., 2006). In effective schools, administrators, teachers and other school personnel share

the philosophy that all students can learn and that every staff member is responsible for creating an environment in which all students, including ELLs, can be successful (Garcia & Ortiz, 2008; Ortiz, 2002). Among the characteristics of a positive school climate are strong leadership on the part of the principal, qualified bilingual education and/or ESL specialists, high expectations for student achievement, and collaborative, school, family and school relationships.

Academic success also depends on effective instruction (Figueroa, 2002; Gandara, 1999; Liu et al., 2008; Ortiz, 1997; Scribner, 2002; Spinelli, 2008; Wilkinson et al., 2006). Effective instruction is meaningful, functional, both context- and language-rich, and is provided in the native language and/or using English as a second language strategies (Ortiz, et al, 2006). Students are provided appropriate learning opportunities and are actively engaged in the teaching-learning process (Figueroa, 2002). Continuous progress monitoring, using observations and student work samples, for example, at different times and in different contexts, is an important resource for assuring that students are meeting academic standards (Figueroa, 2002).

Early Intervention

The literature recommends that instructional interventions be provided as soon as learning problems are observed (Garcia & Ortiz, 2006). Such interventions can prevent problems from becoming so serious that special education services must be considered.

Differentiated instruction. Instruction should be differentiated to meet the needs of individual students (Linan-Thompson & Ortiz, 2009; Ortiz, 2002). Garcia and Ortiz (2006) recommend diagnostic/prescriptive teaching, which involves carefully sequenced

instruction for struggling learners. Teachers re-teach content or skills using different strategies, and incorporate increasingly intensive interventions for students who continue to experience difficulties despite differentiation. Student assessments, including formal and informal measures, work samples, observation of the student in a variety of settings, etc., may be used to identify the child's strengths and needs (Garcia, 1994; Ortiz & Yates, 2002). If problems are not resolved through differentiation, teachers may need assistance in meeting students' needs.

Problem solving teams. Most schools now provide support systems for general education teachers who are unable to resolve students' behavioral and/or academic problems in the context of their classrooms (Truscott, Cohen, Sams, Sanborn and Frank, 2005). These supports take a variety of forms, but most involve intervention assistance teams, including, for example, Teacher Assistance Teams (Chalfant & Pysh, 1989) or Student Assistance Teams (Ortiz et al., 2006) and/or standard treatment protocols (National Center on Response to Intervention, 2007). Standard treatment protocols use specific instructional interventions or programs to address the needs of multiple students; in contrast, problem-solving approaches design interventions for the individual student (Bender & Shores, 2007). Both the problem-solving teams and standard protocol approaches are intended for the few children who continue to face behavioral and academic problems even after instruction has been differentiated. Moreover, they share the goal of providing support to struggling learners as early as possible to avoid unnecessary special education referrals.

The school district in which this study was conducted used intervention assistance teams for early intervention, rather than standard treatment protocols. Given that, literature on the efficacy of problem-solving teams will be discussed in the following section.

Effectiveness of problem-solving teams. In research settings, problem-solving teams have been found to have several advantages (Garcia & Ortiz, 2006). They reduce the number of referrals, increase the appropriateness of referrals, and decrease unnecessary special education testing. They also result in improved student outcomes. Moreover, by participating in the problem-solving process, teachers develop a greater sense of efficacy in handling difficult-to-teach students and demonstrate more positive attitudes toward struggling learners.

In practice, however, results related to the problem-solving process have been mixed. In a national telephone survey of 171 elementary-level educators from all 50 states, Truscott and colleagues (2005) found that descriptions of interventions reported by respondents were frequently vague and that problem-solving teams did not provide sufficient information to evaluate overall effectiveness. Most teams did not differentiate interventions to meet specific student needs, and few reported goals for intervention in the general education setting. Rather, interventions frequently involved adding services (e.g., remedial instruction, tutoring, or counseling), changing task and performance expectations, or strategies for improving classroom management (e.g., preferential seating or positive behavior supports). Teams rarely considered the full context of the problem (e.g., environmental influences) or considered ecological resources (e.g., community outreach programs, family insights) available to assist children.

Martinez (2006) examined the impact of problem-solving teams on the quality of interventions provided to elementary aged ELLs ($n=40$) in six elementary schools in a Texas urban district. Martinez found that teams were most effective in developing interventions for students at the first stage when teams were composed of teachers (i.e., teacher assistance teams). Twenty students whose teachers were unable to ameliorate performance were provided more intensive interventions. However, students were served by personnel with lesser qualifications than classroom teachers, and were eventually referred to special education for assessment.

These findings suggest that improvement in the implementation of intervention assistance teams is needed. Educators should redefine or redesign intervention assistance teams so that students are able to receive timely and effective interventions. This will increase the likelihood that students who receive special education services are those who truly have disabilities (Rock & Zigmond, 2001). ELLs are educated in all settings. Determining the appropriate course of action for ELLs who are struggling learners is complex and it requires collaboration and training across all disciplines both at the school level and district level (Klinger & Giesler, 2008). This would facilitate the sharing of knowledge. Collaboration can increase the availability of, and access to, general education programs and services that have been shown to be effective for a diverse group of students (Orosco et al., 2008). It is important that interventions be empirically validated with ELLs and that they be implemented with sufficient duration and intensity to accurately determine their effectiveness. Intervention teams should hold regular team building activities and

participate in continuing education activities to enhance their expertise related to the education of ELLs (Ortiz et al., 2006).

Special Education Services for English Language Learners

When general education interventions prove unsuccessful in resolving teaching-learning problems, a referral to special education may be considered. Referrals should be supported by evidence that the student was enrolled in a school with a climate conducive to the success of ELLs, that the core curriculum was effective, and that differentiated instruction and increasingly intensive interventions did not meet students' needs in the context of general education (Ortiz et al., 2006). Assurances such as these increase the likelihood of appropriate referrals.

The special education process, from referral to placement, is discussed in the next section, with a focus on ELLs. Recommended practices are described and factors that make it difficult to distinguish language and learning differences from disabilities are highlighted.

Referral to Special Education

One of the first responsibilities of a referral committee is to identify the problem. However, the information provided by teachers in support of their decision to refer students to special education is often unclear or vague (e.g., student is behind, performing below grade level, not progressing, or academic problems). This makes it difficult to determine the exact nature of academic and/or behavioral difficulties (Liu et al., 2008; Rodriguez & Carrasquillo, 1997; Wilkinson et al., 2006). Student data should allow committees to identify factors that may have contributed to low achievement (Wilkinson et

al., 2006). Such factors might include, for example, inconsistent schooling, trauma or illness, or significant life events such as the loss of a parent. Committees use the data to brainstorm possible explanations of presenting difficulties and/or to hypothesize about causes of problems, other than the presence of a disability.

If data regarding interventions implemented to address problems in the general education classroom, or through alternative programs and services (e.g., remedial reading or counseling), are insufficient, the referral committee should design and implement intervention plans before requesting a special education assessment (Klingner & Harry, 2006; Ortiz, 1997). Student progress should be monitored for an amount of time sufficient to determine whether the interventions will resolve behavioral issues or close achievement gaps before an FIE is conducted (Wilkinson et al., 2006).

The referral committee should feel confident that all factors relevant to the student's academic and behavioral performance have been reviewed, that the student was provided differentiated instruction, and that interventions provided were culturally and linguistically appropriate (Wilkinson et al., 2006). Data should show that although the interventions attempted were of sufficient duration and intensity, the student continued to exhibit substantial problems. Students whose problems have not been resolved by this type of support will likely benefit from a comprehensive evaluation. When the referral committee recommends that a student be evaluated, they should clearly describe student's current academic and behavioral difficulties. They should also develop a list of unresolved issues to be addressed in the FIE (Wilkinson et al, 2006).

The few studies that have examined referral practices involving ELLs provide evidence that referral teams do not always consider background factors or provide culturally relevant interventions to resolve students' difficulties before requesting an FIE (Klingner & Harry, 2006; Liu et al., 2008; Rodriguez & Carrasquillo, 1997; Wilkinson et al., 2006). Rodriguez and Carrasquillo (1997) reviewed the school records of 46 elementary-age Spanish-speaking ELLs referred or placed in special education, and found that referral committees failed to consider language and cultural differences as an alternative reason for poor academic progress. Twenty-eight percent (n=13) of the students had been in the U.S. three years or less. Even though Spanish was the only language spoken in the home for 98% (n=45) of the students, more than half did not receive Spanish language instruction. These findings are significant in that it generally takes students in bilingual classes five to seven years to develop the academic language skills needed to successfully compete in the classroom (Cummins, 2000). It can take up to nine years to develop the same skills for students who do not receive native language instruction (Thomas & Collier, 2002). Rodriguez and Carrasquillo (1997) believed that the primary reasons for special education referral of Spanish-speaking ELLs were educators' lack of understanding of academic difficulties faced by ELLs when they are in the process of acquiring a second language.

Klingner and Harry (2006) observed referral committee meetings for 11 ELLs who had been referred to special education. Six of the students were referred for assessment at the first referral meeting. Committee members paid only cursory attention to student data

(e.g., language proficiency and achievement data) or to interventions that had been provided to address student issues. Teachers may need training to better document classroom interventions attempted before referrals. Referral committees should insist that such documentation be provided before requesting an FIE (Ortiz, 2002). Early intervention data are essential when referral committees decide whether students have been provided with meaningful, appropriate pre-referral strategies and adequate opportunities to learn across time and settings. If these conditions have been met, a special education referral is more likely to be justified (Wilkinson et al., 2006).

Full and Individual Evaluations

IDEA (1997) includes several provisions to protect the rights of culturally and linguistically diverse (CLD) students in the FIE process. For example, assessments must not discriminate on the basis of race or ethnicity. Evaluation materials must be administered in the language and form most likely to yield accurate information about what the child knows and can do academically, developmentally, and/or functionally, unless it is not feasible to do so (IDEA Regulations 34 CFR § 300.352). They must also be valid and reliable and used for the purposes for which they were designed. The FIE must be conducted by trained and knowledgeable personnel (IDEA Regulations, 34 CFR § 300.352(b)[h]). However, complying with these mandates when students are ELLs is difficult for several reasons, including a shortage of bilingual assessment personnel and/or of assessment personnel adequately trained to assess ELLs, and limited availability of test instruments and procedures developed specifically for ELLs. Consequently, assessment personnel are frequently in the position of having to test students in English and/or relying

on inappropriate instruments and procedures. Questionable assessment data create problems for multidisciplinary teams that base eligibility determinations on the results of FIEs (Alvarado, 2002; Liu et al, 2008; Ortiz, 2002; Rhodes et al., 2005; Rodriguez & Carrasquillo, 1997; Valdez & Figueroa, 1994).

Assessment Personnel

The shortage of assessment personnel who are adequately trained to assess ELLs undermines appropriate identification. Ochoa, Rivera and Ford (1997) found that a majority of school psychologists who conducted bilingual assessments did not have confidence in their ability to effectively evaluate ELLs. Results of their survey of 1,507 members of the National Association of School Psychologists in eight states with large concentrations of ELLs (i.e., Arizona, California, Colorado, Florida, New Jersey, New Mexico, New York, Texas) showed that thirteen percent ($n=114$) of school psychologists who conducted bilingual evaluations were themselves culturally and linguistically diverse; seven percent ($n=60$) were Hispanic. More than half of the respondents ($n = 859$; 57%) indicated they conducted bilingual assessments; however, 704 of them (82%) indicated they had received “less than adequate” training in how to assess ELLs and in how to interpret bilingual psycho-educational assessments ($n = 661$; 77%). Additionally, respondents reported they needed training in cross-cultural issues ($n = 571$; 66.5%) and second language acquisition (670; 78%).

The shortage of qualified assessment personnel is even more severe in the area of speech and language pathology. In 2007, the American Speech and Hearing Association (ASHA) reported that only 1% of their 9,200 members spoke a language other than

English (Bedore & Pena, 2008). Roseberry-McKibbin, Brice, and O'Hanlon (2005) examined the perceptions of 1,736 ASHA members regarding bilingual assessments. Respondents identified a lack of speech therapists that speak the language(s) of the student they test, lack of appropriate SI assessments for bilingual students, and limited availability of other bilingual professionals as the most common barriers to serving ELLs.

Most speech and language pathologists in the Roseberry-McKibbin et al. (2005) study indicated they had received at least some coursework related to bilingualism; only 27% of SLPs reported receiving no training. While it is disconcerting that almost a third had no training, this was a dramatic improvement over the 77% who gave this response in a similar survey conducted by Roseberry-McKibbin and her colleagues in 1999.

Respondents who had taken a university course on bilingualism, compared to those who had taken a course that included some content related to bilingual issues, or who had not taken a course at all, reported fewer problems in distinguishing a language difference from a disorder less frequently. They were more concerned about issues such as lack of appropriate instruments. SLPs with less training seemed unaware of the complexity of reducing bias in assessments. Roseberry-McKibbin et al. (2005) concluded that additional coursework in bilingual assessment was critical to raising awareness and improving practice (Restrepo & Silverman, 2001; Roseberry-McKibbin et al., 2005).

Employing bilingual assessment personnel does not guarantee equitable assessments (Ortiz & Yates, 2002; Rosemary-McKibbin & O'Hanlon, 2005; Wilkinson et al., 2006). If institutions of higher education prepare students to assess English speakers, bilingual individuals will not have the opportunity to develop the requisite knowledge and

skills to conduct bilingual evaluations (Bedore & Pena, 2008). Moreover, they may not understand how the native language, the process of second language acquisition, and/or cultural differences influence speech/language development and academic achievement (Figueroa & Neusome, 2006; Rodriguez Carrasquillo, 1997; Valdez & Figueroa, 1994). This is substantiated in studies that show that bilingual assessment personnel rely on results of outdated oral language proficiency assessments and do not consider how a student's lack of mastery of the first and/or second language can impact assessment outcomes (Wilkinson, et al., 2006; Liu, 2008).

Issues with assessment instruments and procedures used with ELLs

Standardized procedures are of questionable validity when they are used with ELLs because they do not adequately distinguish between learning and/or communication disorders or lack of language proficiency (Figueroa & Hernandez, 2002).

Norm referenced tests. The purpose of norm-referenced tests is to provide an objective and fair comparison among test-takers with similar characteristics and experiences (Sattler, 2001). However, few tests are normed on ELLs and they often have poor psychometric properties (Figueroa, 1999; Ortiz 2000; Ortiz, 2002; Valdez & Figueroa, 1994). Despite these limitations, special education assessment personnel frequently use norm-referenced instruments that are not representative of the language, culture, and other background experiences of the student, and subsequently use the results to make eligibility recommendations (Liu et al., 2008; Ortiz, 2002; Wilkinson et al., 2006). This is problematic in that inappropriate instruments likely underestimate students' abilities (Figueroa & Hernandez, 2002).

Language issues. Tests normed for bilingual populations in the U.S. should represent the students' native languages and accommodate variations in use resulting from language contact (Kester & Peña, 2002). However, few special education assessments are available in languages other than English; (Bedore & Pena, 2008). While instruments are more readily available in Spanish, these are oftentimes normed outside the U.S. and thus do not adequately represent the experiences of ELLs reared in this country (Langdon, 2008). Moreover, they do not reflect the level and quality of exposure to both Spanish and English or how language use is influenced by language contact, that is, when more than one language is used at the same time and in the same place (Heine & Kuteva, 2005). With regard to the latter, bilingual children may apply Spanish language rules to English (e.g., adding a Spanish verb ending to an English word as in *parkear* for *estacionar* [to park]) or, vice versa, applying Spanish language patterns to English (e.g., in Spanish the adjective follows the verb so the child may say, "That's a car blue"). Students' answers to test items may be correct even though the structures do not conform to those of the language of testing.

Test translations. The literature cautions against the use of translated tests because their validity is highly questionable (Liu et al., 2008; Ochoa & Ortiz, 2005; Ortiz & Yates, 2002; Sattler, 2001; Valdez & Figueroa, 1994). Translating a test assumes that the level of item difficulty remains constant across languages and that language content is culturally and linguistically relevant (Bedore & Pena, 2008; Kester & Pena, 2002; Restrepo & Silverman, 2001; Sattler, 2001; Valdez & Figueroa, 1994). Restrepo and Silverman (2001) found several discrepancies in item difficulty when they examined the content and

construct validity of the Spanish version of the Pre-school Language Scale-3 (PLS-3; Zimmerman, Steiner & Pond, 1993), a popular language assessment frequently administered to Spanish-speaking ELLs suspected of having language disabilities. The participants were 37 early elementary Spanish-speaking ELLs (mean age = 5.6 years) from Georgia; each participant was administered every item on the PLS-3. The number of students who answered an item correctly and incorrectly was calculated to examine the overall progression of item difficulty on each subtest. Since the PLS-3 is a developmental scale that assumes an age progression, the vast majority of children should be able to correctly respond to the basal, or the first item at a given age-level. When students' reach a ceiling (e. g., a required number of consecutive incorrect answers) the subtest is discontinued because items after the ceiling should be too difficult for students to answer. However, Restrepo and Silverman (2001) found that the ratio of participants who answered an item correctly to participants who were administered the item did not decrease systematically across items on auditory comprehension and the expressive language subtests. For example, on the auditory comprehension subtest, lower items were answered correctly by less than half the participants while subsequent, and supposedly more difficult, items were answered correctly by more than 80%. Sixty percent of participants responded correctly to the last item of the subtest. When ELLs find lower test items difficult and higher test items easier, they are apt to reach the ceiling of the test sooner. Results obtained from these tests are likely to underestimate ELLs' knowledge and will not produce a valid representation of what ELLs actually know (Valdez & Figueroa, 1994). If results from these tests are used to identify ELLs as SI, the likelihood of misidentification

is increased. Restepo and Silverman (2001) also determined that many of the items were inappropriate as a number of children lacked prior experience with the vocabulary on the PLS-3 (e.g., parachute, wheelbarrows, stamps). Moreover, aspects of language important to the identification of a language impairment were not addressed (e.g., gender and verb agreement). The authors concluded that there was little evidence of construct or content validity demonstrated in the PLS-3; therefore, results from this test should not be used to determine SI in young Spanish-speaking ELLs. Despite findings such as these, assessors routinely use translations and report results without cautioning consumers of these data that the results may not be valid (Rhodes et al., 2005; Sattler, 2001). For example, Liu (2006) reported that bilingual speech and language pathologists assessed ELLs and classified them as having language delays primarily on results of a speech/language test that had been translated from English into Spanish, but not normed.

Equivalent measures. Even rigorous attempts at developing standardized tests in Spanish that are equivalent to the English versions have not produced psychometrically valid tests. Tests in Spanish may lack construct validity (i.e., tests do not measure what they purport to measure) in Spanish (Figueroa, 2002, Spinelli, 2008). For example, Kohnert and Medina (2009) noted that native English speakers with SI often have difficulty with third person verb endings (e.g., I walk, he/she walks) and may have difficulties with past-tense verb endings (e.g., he walked). In contrast, Spanish-speaking children with SI may not have problems with these structures, but may have difficulty with other structures, such as plural nouns and the genders of articles (e.g., los gatos - the cats) and with noun morphology (e.g., dámelo - give it to me). Structural differences make it

difficult to develop equivalent measures of language skills in two languages. The problem is that the tests developed for ELLs may incorporate grammatical forms appropriate for Spanish speakers, as well as content and themes familiar to them, but the actual test format and areas assessed are based on English structures.

The Word Structures subtest of the Clinical Evaluation of Language Fundamentals-3 (CELF-3; Semel, Wiig & Secord, 1996) assesses verbal expression by having children listen to a partial sentence and end it with a grammatically correct word or phrase. Bedore and Pena (2008) found that comparable items that were expected to be difficult for native English children with language impairments were easier for many Spanish-speaking children with disabilities assessed using the word structures subtest (estructura de palabras) of the CELF-3 (Semel, Wiig & Secord, 1997). Consequently, Spanish-speaking children with language impairments may go undetected because of differences in item difficulty across languages.

Prescriptionism. Tests oftentimes divide skills into distinct parts (Damico, 1991; Flanagan, Ortiz & Alfonso, 2007). For example, language skills are said to include independent skills such as articulation, vocabulary, and language use; reading may be defined as including phonemic awareness, phonics, vocabulary and comprehension. Each of the components is then tested in isolation, and results are used to describe a student's reading ability, an approach that ignores the synergistic relationship among the skills required for students to be effective listeners, speakers, readers, and writers. These problems are exacerbated when discrete skills tests are also based on the assumption that there is a proper or correct language form, and, thus that answers to test items are correct

only if they are found in scoring manuals (Damico, 1991). Variations in expected responses, such as those previously described in relation to language contact, are counted as errors, even when they are appropriate from the perspective of the student's language, dialect, or culture (Bedore & Pena, 2008; Roseberry-McKibbin & O'Hanlon, 2005; Valdez & Figueroa, 1994).

Authenticity. To ensure that the assessments are reliable, items on norm-referenced tests are highly standardized (Damico, 1991). Test developers control the testing situation as much as possible, for example, by scripting instructions, specifying exactly how materials will be presented, and specifying response times. Consequently, ELLs are assessed in contrived settings and in formats with which they may not be familiar (Garcia, 1994). They may also be tested on information to which they have never been exposed or which is out of context with their experiences at home or in the classroom.

Assessments may not reflect how skills are developed and/or how they are used in real situations (Damico, 1991). For example, Jimenez, Garcia and Pearson (1995) examined differences in the reading strategies used by two bilingual readers and a native English reader. Strategy use was assessed using think-alouds, prior knowledge assessments, and an interview. In a think-aloud, students talk about the strategies they use to make sense of the text. The examiner marks the text at key points and then asks students to explain what they read and any problems they might have had in understanding the text (Jimenez et al., 1995). The researchers found that cultural and linguistic familiarity resulted in qualitatively different experiences for the three readers. For the two bilinguals, reading expertise and the explicit vocabulary knowledge in both languages

affected reading comprehension when the girls were focused on strategies that helped them deal with unknown vocabulary. The less successful bilingual reader believed that her knowledge of English reading facilitated Spanish reading, not vice versa, whereas the more successful bilingual reader believed that there was a reciprocal relationship between the two languages that enabled her to comprehend what she read in both. In contrast, the monolingual reader, familiar with both the content and the vocabulary she was reading, was able to concentrate on comprehending and interpreting the text as a whole. The assessment methods used by the authors reflected greater levels of language realism and provided insight into how monolingual and bilingual readers make sense of narrative and expository text. They also provided better information upon which to base intervention strategies.

In summary, the lack of appropriate assessment instruments and procedures for ELLs, coupled with a shortage of trained bilingual personnel, has significant implications for eligibility determinations. Assessment results are used by MDTs to determine whether the child has a disability (IDEA Regulations, 34 CFR § 602 [3]). Decisions based on inaccurate or incomplete data lead to both false positives and false negatives. Students with disabilities are not identified and thus are denied special education placements; students without disabilities are inappropriately placed in special education programs (Liu et al., 2008; Ortiz, 1997; Wilkinson et al, 2006). In some instances students do have disabilities, but not the one for which they are identified (Liu, 2008; Wilkinson et al., 2008). In all of these instances, students are denied appropriate educational opportunities.

Furthermore, assessment results are also used to identify students' strengths and weaknesses and to recommend interventions for students with disabilities (Sattler, 2001). Selecting goals, objectives, and interventions based on questionable assessment outcomes is unlikely to result in improved academic performance (Wilkinson et al., 2006). Rather than closing the achievement gap between ELLs and native English speakers, the gaps may widen.

Recommended Practices for Assessing ELLs

Assessment is a systematic process for arriving at a good understanding of a student's academic, emotional and behavioral needs (Sattler, 2001). To that end, the literature provides guidelines and recommended practices for assessment of English language learners. Implementing these practices may help reduce bias in assessment, improve eligibility determinations, and improve educational planning for students with disabilities.

Assess in both languages using equivalent instruments or procedures. English language learners should be assessed in their native language and in English (Ortiz & Yates, 2002). Despite earlier cautions about the instruments themselves, there are important reasons for using equivalent procedures in assessment of ELLs.

Testing in both languages using equivalent procedures, even if informally, allows assessment personnel to compare what students know in each language, but also to understand what they know in aggregate (Ortiz & Yates, 2002). It also provides a way to compare a student's responses and performance on similar tasks. Failure to assess in both languages risks underestimating students' abilities. For example, Bedore and colleagues

(2005) found that when elementary-age ELLs were assessed in both Spanish and English, there were differences in students' semantic knowledge (i.e., the meaning or the interpretation of words or sentences). The aggregate score in Spanish and English was more likely to be in the average range for Spanish dominant students, while scores in each language were lower. This finding reinforces the importance of giving students credit for what they know and can do, regardless of the language in which they demonstrate knowledge and skills (Ortiz & Yates, 2002).

Use both informal and formal assessments. Due to the limitations of standardized instruments, it is important to use informal assessment data to corroborate results of formal assessments (Ortiz & Yates, 2002). Informal assessments take a variety of forms, including, for example, curriculum-based, portfolio, and dynamic assessments. Curriculum-based assessments (CBA) typically engage students in authentic tasks related to subject or content based on the actual curriculum (Spinelli, 2008). They provide meaningful information about what the student has learned in relation to what has actually been taught, and thus provide better data for planning and designing interventions. Probes are developed using classroom instructional materials (e.g., reading passages or math problems), students are assessed, and results are used to profile students' strengths and needs (Deno, 2003).

Dynamic assessments incorporate interventions in the assessment. Using a test-teach-retest approach (Spinelli, 2008), the evaluator first establishes the child's current functioning level, and then teaches the targeted task, paying attention to the types of scaffolds and supports that facilitate student learning. A follow-up assessment is

conducted to determine what the student learned as a result of the intervention. For example, if the student does not understand elements of a story, the evaluator teaches the elements using examples and illustrations. Afterward, the evaluator assesses the results, first providing scaffolds and then removing them systematically to assess whether the student now understands story elements and/or the level of support needed to demonstrate this knowledge. Assessors who use dynamic assessment approaches are in a better position to understand the source of the student's difficulties, for example, whether the child was unfamiliar with the task or lacked prior experience in story telling (Garcia, 1994; Spinelli, 2008). There is more reason to consider the presence of a disability as an explanatory factor of learning difficulties when students do not respond to interventions with mediation.

Portfolio assessments involve collecting a sample of the student's work (e.g., written products, assignments, tests, etc.) over time as a way of monitoring academic progress. They provide more accurate pictures of how student performance has changed over time (Garcia, 1994; Spinelli, 2008), and are helpful in pinpointing areas where additional instruction is needed in the native language and/or in English (Garcia, 1994). Student portfolios may contain formal assessments such as benchmark and achievement tests, and informal measures such as observational checklists, progress notes, audio and video recordings and class tests. They may also include written products that provide data about students' reading and English language development such as student work samples.

Informal assessments oftentimes provide better information to judge language proficiency because skills are assessed using real-life, not contrived, communication tasks

and settings (Ortiz & Garcia, 1990). For instance, conversation samples are helpful in assessing how well students can engage effectively in two-way interactions, in the role of both speaker and listener; story telling and retelling tasks provide insight into development of narrative skills, the child's understanding of content schema, and ability to organize and sequence events; dictation tasks show whether the student can follow and understand classroom discourse; cloze tasks provide a measure of background knowledge as well as students' understanding of language structures (e.g., vocabulary, syntax and grammar). Together, these assessments help describe students' conversational and academic language skills, in the native language and in English. When assessments are conducted in English only, patterns of performance, coupled with interventions to increase English proficiency, may help determine whether presenting difficulties are related to limited English skills (Ortiz & Yates, 2002).

Multiple Criteria. Both research and special education policy stress the importance of using multiple criteria in making eligibility determinations. Yet, Wilkinson et al. (2006) and Liu et al. (2008) found that discrepancies between IQ and achievement documented in FIEs were the primary basis for the LD eligibility determinations for the ELL samples in their studies, respectively. Klingner and Harry (2006) also concluded that team members emphasized test scores in making eligibility decisions, giving little consideration to environmental factors (e.g., poor instruction).

The ease of establishing LD eligibility on the basis of discrepancy models has contributed to the overuse and misuse of these models (Kavale & Forness, 2003). Research has demonstrated that neither the presence nor the absence, of an ability-

achievement discrepancy is a reliable or valid indicator of LD. Establishing eligibility based solely on a documented intelligence-achievement discrepancy is too simplistic and contributes to the vagueness regarding the LD concept (Kavale & Forness, 2003, Mather & Gregg, 2006). Individuals with LD typically present an uneven profile of cognitive abilities, demonstrating difficulties in some types of learning but facility in other types of performance, thus using the difference between an IQ score and achievement score as the sole identification criterion is an unreliable indicator of LD (Liu et al., 2008; Wilkinson et al., 2006;). Informal assessment methods (e.g., portfolio assessment, testing limits, dynamic assessment), and a thorough consideration of all factors that influence student learning (e.g., significant life events, inconsistent schooling, type of language support program) facilitate determinations (Wilkinson et al., 2006).

Eligibility Determinations

Exclusionary Clause. MDTs must determine the impact of environmental, linguistic, cultural and economic factors on a student's performance prior to making an LD determination (Klingner & Harry, 2006). However, federal and state guidelines for the implementation of IDEA provide little guidance as to how to establish the extent to which such factors affect students' academic performance (Klingner & Harry, 2006, Wilkinson et al., 2006).

After videotaping and analyzing 20 MDT meetings, Ysseldyke, Algozzine, Richey and Graden (1982) concluded that team members could not differentiate between relevant and trivial information available to them. Relevant information included specific statements concerning the student's actual and expected levels of performance (e.g., s/he

reverses letters on reading assignments, the student's math achievement scores are above grade level), and statements related to LD criteria (e.g., his IQ is 104 but he is three years behind in reading). Their analyses suggested that 83% percent of MDT statements were irrelevant and that another 5% did not support the eligibility determination.

Research suggests that there are more basic issues than distinguishing relevant from irrelevant data for ELLs at MDT meetings. MDTs appear to be unaware that they are often working with inappropriate or incomplete data: lack of documentation of early intervention (Klingner & Harry, 2006); lack of, or outdated, language proficiency results (Liu et al, 2008); and assessment results obtained from inappropriate instruments (Wilkinson et al., 2006) or adaptations (Liu, 2006). MDTs also fail to question the expertise of personnel who conduct these assessments, a problem that has been clearly documented in the literature (Gutkin & Nemeth, 1997; Klingner & Harry, 2006). Moreover, they frequently do not seek input from parents (Gutkin & Nemeth, 1997) or do not acknowledge their presence at these meetings (Klingner & Harry, 2006), even though families are a valuable resource in gaining insight as to why their child is experiencing academic and behavioral difficulties (Kalyanpur & Harry, 1997; Wilkinson et al., 2006).

Wilkinson et al. (2006) point out that MDTs must make complex decisions related to students' cultural and linguistic diversity, but often lack the expertise to do so. This expertise includes: (a) interpreting assessment data in light of background characteristics, and (b) the ability to use these data to rule out factors such as linguistic, cultural, socioeconomic status and lack of opportunity to learn as the cause of students' difficulties. For example, information about the type of instructional programs in which the child is, or

has been, served, language proficiency, the amount of native language and ESL instruction they have received can all influence academic achievement. Factors such as these should be ruled out in determining whether a student has a disability (Rodriguez & Carrasquillo, 1997; Thomas & Collier, 2002; Wilkinson et al., 2006).

Use multiple data sources. IDEA prohibits using a single measure or assessment as the criterion for determining whether a child has a disability (§300.304). As suggested earlier, decisions are to be based on multiple sources of information including, for example, thorough review of student records, parental input, and interviews with the student, as well as teachers and counselors. Moreover, classroom observations, and social, health, and developmental histories may assist in determining the reason for poor behavior and/or academic performance (Klingner, & Harry, 2006; Wilkinson, et al., 2006).

Family input. Families can provide important insights about their children's problems at home and school; thus, family input is an important part of the evaluation process. When families are culturally and linguistically diverse, a concerted effort must be made to understand the family's cultural values, concerns, and beliefs so that meaningful communication between the families and schools can be established (Kalyanpur & Harry, 1997).

Harry (1992) examined the extent and quality of the interactions of 12 low-income Puerto-Rican parents with the special education system to better understand the factors that facilitated or obstructed parental participation. The parents were described as being in the early stages of acculturation to the U.S.; they had little formal education. A common finding was that parents did not accept the labels of mental retardation and LD as

appropriate descriptions of their children's difficulties. They tended to interpret their children's difficulties in the context of family identity and spoke of relative strengths and weaknesses in terms of family characteristics. The label of mental retardation evoked more confusion among parents (Harry, 2008). Harry theorized that culturally diverse parents tended to view disabilities in a broader context, rather than as a deficit. The parents believed that their child's delays could be ameliorated with family effort and support. Reactions tended to be negative when informed that disabilities were the result of pathological issues (Harry, 2008).

The parents in Harry's (1992) study had a limited understanding of the educational system. She noted that these parents had important information and insight into the difficulties of their children. When professionals were receptive to parental feedback, the views of parents had an important impact upon educational decisions made by the school.

Harry (2008) stressed that the family's and cultural backgrounds should be taken into consideration when developing and implementing an intervention program; such a program will be much more effective if it is developed in collaboration with the family, and with respect for the family's cultural beliefs. Parents may provide alternative explanations as to why their child is experiencing difficulties at school. They may also be able to identify any events that might have contributed to their child's current struggles (e.g., death of a family member). Moreover, misconceptions that the family has about the special education process can be addressed. When parents are included as collaborators, and when both parties are in agreement as to the nature of the disability, the potential for

accurate eligibility determinations is increased. An added benefit is that parents will be more receptive to implementing complementary interventions at home (Sattler, 2001).

Reading Disabilities and Speech and Language Impairments

Students with reading disabilities are at increased risk for speech and language impairments (Catts, 1993, Kohnert, 2010; Langdon, 2008; Leonard, 2000).

The following section describes the characteristics of students with reading disabilities, students with speech and language impairments and the characteristic of students with both speech and language impairments and reading disabilities.

Characteristics of Reading Disabilities in Native English Speakers

Researchers have identified three types of reading disabilities: deficits in phonological processing, deficits in reading fluency and deficits in comprehension (Meisinger, Bloom & Hynd, 2010; Wolf & Bowers, 1999). While students may exhibit only one of these, according to Moats and Tolman (2008), approximately 70% of poor readers have two or three types of reading problems. About five percent have phonological deficits only, approximately 10 percent of poor readers have good phonological awareness, but read connected text at an excessively slow rate, and another 15 percent decode words better than they comprehend.

Young elementary students who exhibit phonological problems have difficulty detecting, discriminating differences and manipulating parts of spoken language (Klingner & Geisler, 2008). These children have trouble retaining letter names, remembering which letters make which sounds, as well as sounding out words as they read (Moats & Tolman, 2008; National Reading Panel, 2000; Wolf & Bowers, 1999).

The main goal of reading is to gain knowledge from texts. Therefore, the ability to decode text fluently, that is, to read text quickly, accurately and with appropriate expression (National Reading Panel, 2000), is essential for reading comprehension. Children's comprehension problems may be explained by a variety of factors. These include poor vocabulary (Snow, 1990; Stahl & Fairbanks, 1986), poor memory (Swanson, 2008), poor listening comprehension (Stahl & Fairbanks, 1986), or language learning disorders (Kohnert, 2010; Leonard, 2000).

Spanish-speaking ELLs with Reading Difficulties

Research on Spanish-speaking ELLs with reading-related difficulties, comparable to that of their native English-speaking peers, is scarce and most of the research available focuses on the acquisition of basic reading skills (Klingner, Artiles & Barletta, 2006). Some studies have sought to determine if similar characteristics found in monolingual English speakers who exhibit difficulty acquiring basic reading skills are evident in ELLs learning to read in English (e.g., Durgunoglu, Nagy & Hancin-Bhatt, 1993; Manis, Lindsey & Bailey, 2004). These studies have generally found that young ELLs who experience difficulties acquiring basic reading skills exhibit problems with retaining letter names (Manis et al., 2004), acquiring letter-sound association, and sounding out words (Manis et al., 2004). Durgunoglu, Nagy and Hancin-Bhatt (1993) examined 31 Spanish-speaking struggling readers in a first grade transitional bilingual education program. They found that students with poor Spanish word recognition and weak phonological awareness skills not only had difficulty learning to read in Spanish, but also had difficulty with English reading acquisition. On the other hand, students with strong Spanish word recognition and

well-developed phonological awareness skills were more likely to acquire reading skills in Spanish and English without difficulty.

The few studies that have investigated reading fluency (Linan-Thompson, Cirino & Vaughn, 2007; Vaughn, Mathes, Linan-Thompson, & Frances, 2005) show that young ELLs with reading problems frequently have difficulty reading connected text fluently. Manis, Lindsey and Bailey (2004) examined the extent to which Spanish testing predicted the English and Spanish reading proficiency of 249 Spanish-speaking kindergarten and first grade ELLs in Texas. They found that students with the lowest reading abilities in Spanish and English tended to have poor print awareness, a slow fluency rate, and had difficulty retaining letters in both Spanish and English.

Unlike studies of native English speakers which have shown a strong positive relationship between reading fluency and reading comprehension (e.g., Fuchs, Fuchs & Maxwell, 1994; Reidel, 2007), researchers have found this relationship is not robust among ELLs (Crosson & Lesaux, 2010). On the contrary, many ELLs can read connected text fluently, but still exhibit poor reading comprehension (Crosson & Lesaux, 2010; Geva, 2000; Klingner & Geisler, 2008). Crosson and Lesaux (2010) examined the relationship between text-reading fluency and reading comprehension for 76 Spanish-speaking fifth graders enrolled in a large urban school district in the southwestern part of the U.S.; all had been enrolled in transitional bilingual programs. They found that the impact of text-reading fluency on comprehension was moderated by an interaction such that only students who could read connected text fluently and also had strong listening comprehension and vocabulary skills had strong reading comprehension skills. On the other hand, ELLs who

could fluently read connected text, but had poor listening comprehension and vocabulary skills, were poor comprehenders. These results suggest that assumptions about the relationship between text-reading fluency and comprehension do not readily apply to ELLs as they do to native English speakers. Different methods must be utilized to ensure that the oral language skills of ELLs are appropriately developed (Cirino et al., 2009). These methods include (a) ensuring that active participation and peer interaction is part of the classroom setting; (b) immersing students in a language and print-rich environment; (c) teaching literacy as meaning-driven process rather than strictly adhering to grammatical rules, which should be addressed, but not as the primary focus; and (e) setting high expectations for the entire school community (Klinger & Giesler, 2008).

Jimenez et al. (1997) found that ELLs who struggled with reading comprehension focused more on the surface aspects than on reading fluently. Struggling readers also had limited vocabularies, tapped less into prior knowledge, used fewer comprehension strategies, and were less able to transfer comprehension strategies from Spanish to English. These findings suggest that ELLs must be taught to effectively tap into their prior experiences. Before discussing a topic, teachers should begin by asking students to share what they already know about the topic, incorporate meta-cognitive strategies that allow students to learn complex thinking and vocabulary, and use direct explicit skill instruction for phonics and grammar instruction (Jimenez et al., 1997). Klingner and Vaughn (1996) also noted that 26 middle school ELLs identified as reading four grade levels below expected levels in English reading were better able to successfully apply reading strategies when they were encouraged to discuss the material using both Spanish and English.

There have been only a few studies that examined the educational characteristics of ELLs with learning disabilities (Liu, 2006; Liu et al., 2008; Ortiz et al., 1985; Ortiz & Polyzoi, 1986; Rodriguez & Carrasquillo, 1997; Wilkinson et al., 2006). Nevertheless the findings have been fairly consistent. For example, the primary reason teachers refer ELLs for a special education assessment has remained the same; general academic problems, especially reading or language-related problems (Liu et al., 2008; McCardle et al., 2005; Ortiz & Polyzoi, 1985; Rodriguez & Carrasquillo, 1997; Wilkinson et al., 2006). Forty-eight percent ($n=22$) of the 46 students in Rodriguez and Carrasquillo's (1997) study were referred for academic difficulties. Another 15% ($n=7$) were referred for reading problems, and 13% ($n=6$) for language difficulties.

Assessment Instruments and Procedures

Ochoa, Powell and Robles-Pina (1996) surveyed 859 school psychologists who indicated they completed bilingual psycho-educational assessments. Forty-three percent ($n=369$) of the sample of examiners who resided in the eight states with the highest concentration of ELLs, including California and Texas, indicated they spoke both English and Spanish. Respondents identified the assessments most frequently administered to ELLs.

Fifty-two percent of school psychologists used the *Wechsler Intelligence Scale for Children, Third Edition* (WISC-III; Wechsler, 1991) or the *Wechsler Intelligence Scale for Children-Revised* (WISC-R; 52%). Forty-percent used the *Leiter International Performance Scale*, 38% the Performance Scale of *WISC-III* or *WISC-R* Performance Scale, 38% the *Kaufman Assessment Battery for Children* (K-ABC; Kaufman & Kaufman,

1983), and 36% used *Test of Nonverbal Intelligence–2* (TONI-2; Brown, Sherbenou, & Johnson, 1990). The Ravens Progressive Matrices was used by 25% of those surveyed. The most commonly used cognitive assessment instrument in Spanish was the *Escala de Inteligencia Wechsler para Niños-Revisada* (EIWN-R), which was used by 18% of the participants.

1990) was used by 77% of the respondents (Ochoa, Powell, & Robles-Pina, 1996). Other achievement tests used included the *Wide Range Achievement Test-Revised* (48%) and Achievement Scale of the K-ABC (35%). Of the achievement measures administered in Spanish, the *Batería Woodcock Psicoeducativa Español* (Woodcock, 1982) was used by 79% of the Spanish-speaking participants ($n=244$) and 49% ($n=181$) used the Spanish version of the *Brigance Diagnostic Assessment of Basic Skills*. Of the respondents, 66% ($n=567$) reported that they conducted Curriculum-based Assessment (CBA), which provides a structured platform for evaluating how a child performs using the instructional materials used by teachers.

Two years later, McCloskey and Athanasiou (2000) surveyed 96 members of the Southwestern State School Psychology Association to identify assessments administered to ELLs. Seventy-five percent ($n=72$) of the respondents had conducted bilingual psycho-educational assessments. Results were similar to those of Ochoa et al. (1996) in that the most frequently used standardized IQ test was the WISC-III (57%), followed by the TONI-2 (43%), and the KABC (25%). The most commonly used non-standardized assessment data were observations (79%), teacher judgment (77%), and teacher/parent interview (55%). McCloskey and Athanasiou also found that 51% of the respondents reported that

they used CBA. This study demonstrates that ELLs are frequently not assessed using best practices, which include ensuring that the assessment is conducted in their dominant language as well as English (Bedore & Pena, 2008), corroborating standardized measures that are not normed on ELLs and may not be culturally or linguistically appropriate with informal assessment procedures (Damico, 1991), and using culturally relevant methods such as interviewing parents to better understand the referral concerns (Spinelli, 2008). When best practices are not used, the likelihood that ELLs will be misidentified increases (Liu et al., 2008; Wilkinson et al., 2006).

More recently, Bryon and Rogers (2010) attempted to identify the factors considered in the selection of assessment instruments used with ELLs by 276 bilingual school psychologists who were also members of the National Association of School Psychologists (NASP). When selecting an instrument, bilingual school psychologists most frequently considered the psychometric properties of the measure ($n=10$; 76.1%) and the research conducted on the measure ($n=186$; 57.4%), followed by the child's test taking experience ($n=130$; 47.1) and other factors ($n=68$; 24.6%). Among the other factors considered were teacher reports, history of native language instruction, the student's level of language proficiency, and information contained in the student's file. The researchers found that school psychologists used a range of assessment instruments (per assessment mean = 3.84), and that nonverbal IQ tests were the most frequently used ($n=219$; 79.3%), followed by standardized tests not normed on ELLs ($n=175$; 63.49%) such as the Bateria Woodcock-Muñoz and tests normed on ELLs ($n=164$; 59.4%) such as the Aprenda. Fifty-three percent of bilingual school psychologists ($n=48$) used Curriculum-based

assessments, 34.4% used criterion-referenced tests, and 27.5% used dynamic assessment for assessment of academic achievement. Bryon and Rogers concluded that bilingual examiners who regularly assessed ELLs appeared to have a better understanding of bilingual issues and best practices in the assessment of ELLs when their results were compared to prior studies (e.g., Ochoa et al., 1996). They also acknowledged that a substantial percentage of bilingual examiners (28%) still did not supplement standardized tests with informal measures.

In summary, at least half of school psychologists use CBA (Bryon & Rogers, 2010; McCloskey and Athanasiou, 2000; Ochoa et al., 1996). Unlike standardized achievement tests that assess content that ELLs may not have been exposed to, CBA uses classroom materials. Only about one-quarter of bilingual school psychologists use dynamic assessment, informal assessments recommended for use with ELLs (Bryon & Rogers, 2010). Dynamic assessment procedures allow an examiner to assess students' learning abilities as a function of what they are able to do while being taught, rather than of what they already do know or do not know (Hoover & Barletta, 2008).

Speech and Language Impairments with Concomitant Reading Disabilities

Researchers have shown that about 25 to 30 percent of students with SI also have reading disabilities (Leonard, 2000; Pennington & Lefly, 2001). The nature of the difficulties differentiates students who have good reading outcomes from those with poor reading outcomes (Bishop & Adams, 1990; Peterson et al., 2009, Snowling et al., 2000). Students with SI only do not typically have reading disabilities, even though they may continue to demonstrate phonological deficits (Snowling et al., 2000, Peterson et al.,

2009). Edmundson (1987) studied a group of students (n=88) who had been identified as having speech and language impairment at age four; Bishop and Adams (1990) assessed the reading skills of 71 of these students who were 8 years of age. Snowling, Bishop and Stothard (2000) subsequently evaluated the reading skills of 56 students from the Edmundson cohort who were 15 years of age at the time of their study. On average, these students performed significantly worse on the basic reading, spelling and reading comprehension tests of the Wechsler Objective Reading Dimensions (Bishop & Stothard, 2000) when compared with a control group of 51 adolescents without a history of speech and language impairments. Ten of the 56 students who had been identified as having speech impairments only at age 4 did not exhibit reading difficulties at age 8 or at age 15, even though these 10 performed significantly worse than the control group on the Graded Nonword Reading Test (Snowling, Stothard & McLean, 1995), a task that weights phonological processing heavily (Bishop & Adams, 1990, Snowling et al., 2005). These results suggest that students with a deficit in phonological processing only are not at risk for later reading difficulties when their expressive and receptive language skills are intact.

Another factor related to good reading outcomes in children with language impairments is early literacy and reading achievement. Using a large subsample of kindergarten children who participated in an epidemiologic study of language impairments, Catts, Fey, Zhang and Tomblin (2001) found that the best predictor of the reading development of students with language impairments (n=589) was their kindergarten reading level, as measured by the letter-word identification subtest of the Woodcock Reading Mastery Tests-Revised (Woodcock, 1987). Moreover, reading outcomes were

affected by the length of time students had been diagnosed as having language impairments (Bishop and Adams, 1990; Catts et al., 2003). Students whose language impairments (n=208) were resolved by second and fourth grades had better reading outcomes than those whose language impairments persisted. Syntax skills, assessed using the Test of Language Development-2 Primary (Newcomer & Hammill, 1988) were the best predictors of reading achievement in second and fourth grades. Finally, on average, language impaired students with low nonverbal scores on the Pictorial Intelligence Quotient (PIQ) of the WISC-III (n=9, mean PIQ = 94.50) had significantly lower reading achievement in both second and fourth grades compared to language impaired students with nonverbal IQ's above 100 (n=117, mean = 107.63). Though nonverbal cognitive abilities have not generally been considered to affect reading achievement as much as verbal abilities, when language skills were held constant non-verbal IQ predicted reading outcomes. Catts et al. (2003) believe that it is plausible that analytic reasoning skills tapped by measures of nonverbal IQ may contribute to learning to read. Catts and colleagues (2003) point out that nonverbal ability covaries with higher-level language abilities (Catts et al., 2003; Snowling et al., 2000). For example, if a group of individuals have good verbal reasoning and auditory memory, on average, the majority should also have good nonverbal reasoning and visual memory. However, a causal relationship does not exist.

These findings highlight the importance of early identification of and early intervention for language impairments. Catts et al. (2003) indicated that language impairments should be considered as a risk factor for children, and that they should receive

appropriate early intervention. If children's language impairments can be remediated before second or fourth grade, the risk of creating a subsequent reading disability is diminished.

There is a lack of research on ELLs with speech and language disorders; research on the intersection of communication disorders and reading disabilities is virtually non-existent. As indicated previously, effective readers have good oral language skills in their native language (Langdon, 2008). The relationship between proficiency in English as a second language and literacy acquisition is less well understood. One of the goals of this study is to examine how proficiency in Spanish and in English correlate with reading outcomes, and how speech and language disorders may affect reading skills.

ELLs with Speech and Language Impairments

Reasons for Referral

Studies that provide reasons for the referral of ELLs for speech and language evaluation are scarce. However, Langdon (2008) notes that in a school setting, it is often the speech and language pathologist who is consulted to determine whether a student should be assessed. Langdon (1989) examined the practices employed by 17 bilingual speech and language pathologists by reviewing their speech and language reports for 44 native English speakers and 51 Hispanic ELLs. The reasons given for referring students were concerns about language delays in English and/or Spanish and slow academic progress. Liu (2006) examined the characteristics of 19 ELLs who were identified as speech and language impaired in early childhood, and found that children were referred for primarily three reasons; teachers' difficulty in understanding students' speech, expressive

language delay, and listening comprehension problems.

Determining whether an ELL should be referred for assessment is a complex process because ELLs are a heterogeneous group. While many ELLs are born in the U.S., others immigrate from a number of Spanish-speaking countries or regions, and thus speak different dialects (Kohnert et al., 2009). Students in bilingual classrooms have a wide variation of language experiences prior to entering school. For example, even though students' native and dominant language may be the same, some students may have been exposed to a variety of literacy activities at home and have the pre-requisite skills expected upon entering the classroom (Bedore & Pena, 2008; Klingner et al., 2008; Langdon, 2008). Others may be unfamiliar with classroom expectations and may not have the same level of exposure to literacy activities at home. Attention should be given to the student's language proficiency in each of their languages and their interactions with teachers and students (Langdon, 2008). In determining whether a student should be referred for a speech and language evaluation, referral committees should comprehensively review the language use of family members, teachers and students in both formal and informal environments. Langdon (2008) recommends that the SLP conduct a more comprehensive assessment if the student's language development is significantly different from his or her siblings and the parent(s) report that their child has a language delay in the native language. If the parents do not report delays, the SLP should verify previous educational experiences and previous teachers' concerns. If learning problems are present, the SLP should observe the student in the classroom and provide helpful accommodations.

Assessment

A number of tests have been developed in Spanish; however, few have been adequately normed on native Spanish-speaking ELLs. While Langdon (2008) does not recommend a specific test for assessing Hispanic ELLs, he does make suggestions for appropriate use of the Clinical Evaluation of Language Fundamentals-4 (CELF-4, Semel, Wiig & Secord, 2005) with Spanish-speaking ELLs. For example, even though the CELF-4 was nationally normed on bilingual Spanish-speaking students residing in the U.S., approximately 30% of these students lived in homes where English was spoken 96.8% of the time (Langdon, 2008). In addition, some members of the norming samples were exposed to a third language (e.g., French, Italian and Portuguese). For an overall evaluation of a Spanish-speaking ELL's language ability, Langdon (2008) recommends that results from the CELF-4 be supplemented with a complete family and academic history, parent interview, classroom behavioral observations and observation with peers, and results of other formal and informal measures. Moreover, SLP's could review the results of other linguistic and metalinguistic subtests, such as the word association, digit span and rapid automatic naming, supplemental subtests available for use with the CELF-4. These metalinguistic subtests will assist the examiner in substantiating difficulties with retention of information or other areas that can affect language-processing capabilities. Moreover, ELLs need an evaluation of pragmatic interpersonal communication abilities and analysis of a spontaneous language sample. Assessment tools should not solely be used in determining SI (Langdon, 2008).

Conclusion

General education processes designed to support ELLs who are struggling academically are not culturally and linguistically appropriate and ELLs frequently are not provided the support they need to close achievement gaps (Klingner & Harry, 2006; Rodriguez & Carrasquillo, 1997; Wilkinson et al., 2006). When students are referred, referral committees often do not have members with the expertise needed to identify students who should be assessed because it is likely that presenting problems can be attributed to the presence of a disability (Liu, 2006; Liu, et al., 2008; Ortiz, 2002; Wilkinson et al., 2006). Appropriate identification is compromised when ELLs are evaluated by assessment personnel who lack the requisite knowledge to assess bilingual students (Bedore & Pena, 2008; Harry & Klinger, 2008; Ochoa et al., 1996). In making eligibility determinations MDTs do not carefully review student records and other available information to rule out factors, other than the presence of a disability, that may be contributing to a student's communication and achievement problems (Liu, 2006; Liu et al., 2008; Wilkinson, 2006). These factors include prior experiences, school history, type and quality of instruction, pre-referral interventions (Scribner, 2002), and oral language proficiency in the native language and English (Klingner & Giesler, 2008; Liu et al., 2008; Ortiz & Yates, 2002; Scribner, 2002; Wilkinson et al., 2006). Results of the present study may shed light on how to improve general and special education practices to enhance school outcomes for ELLs, to prevent inappropriate referrals to special education, and to increase the accurate identification of ELLs with reading-related disabilities.

CHAPTER THREE

Method

The purpose of this ex-post facto descriptive study was to develop profiles of elementary-age English language learners (ELLs) in bilingual education programs who (a) were classified as having a reading-related learning disability (LD) in Spanish by school district multidisciplinary teams (MDTs), (b) were identified as having a speech and language impairment (SI) prior to, at the same time as, or after being identified as LD, and (c) received reading instruction in a bilingual special education (BSE) classroom. These students are hereafter referred to as the LD*SI sample. The questions guiding the study were:

1. What were the characteristics of elementary-age Spanish-speaking ELLs when they were initially identified as having reading-related learning disabilities by the participating district's multidisciplinary teams (MDTs)?
 - a. What were their demographic characteristics?
 - b. Why were they referred?
 - c. How were they assessed?
 - d. What were the assessment results?
 - e. What was the nature of students' reading-related LD as determined by MDTs?
2. How did the clinical judgments of an expert panel regarding students' eligibility as having reading-related LD compare with the eligibility determinations of the participating district's MDTs?

3. What were the speech and language characteristics of the elementary-age Spanish-speaking ELLs when they were initially identified as SI by the participating district's MDTs?

- a. What were their demographic characteristics?
- b. Why were they referred?
- c. How were they assessed?
- d. What were the assessment results?
- e. What was the nature of each student's speech and/or language impairment(s)?

The study is a secondary analysis of extant data collected for the Field Initiated Study (FIS), Bilingual Exceptional Students: Effective Practices for Oral Language and Reading Instruction. The FIS, funded by the U.S. Office of Special Education and Rehabilitative Services (OSERS), was conducted between 1999-2002 by bilingual special education faculty at UT Austin. The procedures for the UT FIS will be presented first, followed by the procedures for the LD*SI study.

UT Austin Field Initiated Study

One purpose of the UT Austin FIS was to profile elementary-age ELLs identified as having reading-related LD in Spanish by district multidisciplinary teams. Students whose individual education plans (IEPs) indicated they were receiving reading instruction in bilingual special education resource classrooms at the beginning of the FIS were selected for participation.

Participating District

The UT FIS was conducted in a large urban school district in central Texas. In 1999-2000, the district had a student population of 77,000, of whom 34,000 (44%) were Latino. The district served 13,000 ELLs (17% of the general student population) in bilingual education and English as a second language (ESL) programs. The native language for 93% of ELL students was Spanish. Ten thousand and ten students, 13% of the total student enrollment, received special education services.

The participating district was selected because it had an ideal configuration of services for ELLs in general and special education, which FIS researchers felt would increase the likelihood of appropriate eligibility determinations involving ELLs referred to special education. The district had well-established bilingual education and ESL programs. In addition to bilingual education and ESL teachers, the district employed bilingual school psychologists, bilingual educational diagnosticians, and bilingual speech and language pathologists. The district also offered bilingual special education programs, staffed by bilingual special education teachers, on 10 elementary campuses. Spanish-speaking students in bilingual education programs who were eligible for special education could transfer to one of these BSE schools if their neighborhood school did not offer this service.

FIS Participants

Ninety-one Spanish-speaking ELLs were initially eligible to participate in the FIS and parental consent for participation was obtained for 70 of them, representing 77% of the eligible population. Of the remaining 21 eligible students, (a) six students transferred to another district before parental consent for participation was obtained, (b) four parents declined to participate, (c) parental consent forms were not returned for nine students, and (d) language proficiency and dominance data were not available for two students.

Of the 70 participating students, 42 (60%) were male and 27 (40%) were female. Thirty-two participants (46%) were born in the United States, 26 (37%) were born in Mexico, two (3%) were born in Honduras and one child (1%) was born in El Salvador. Information about birthplace was not available for nine participants (13%). When the study began, 30 (43%) of the participants were in fourth grade, 16 (23%) in fifth, eight (11%) in third, nine (13%) in second, and seven (10%) were in first grade. Forty-seven of the 70 participants (67%) had previously received or were currently receiving speech and language therapy.

FIS Data Collection Procedures

Data collection for the UT Austin FIS involved (a) design of data collection forms, (b) establishing reliability among data coders, and (c) the data collection activity itself.

Design of data collection instruments. Data collection forms were developed to document pertinent information from cumulative, bilingual education, and special education records. These forms were based on corresponding record-keeping forms used by the district. The students' cumulative records contained student demographic

characteristics, grades assigned by classroom teachers or report cards, schools attended, promotion, retention or placement (i.e., the child is socially promoted or passed to the next grade even though he or she did not meet grade level standards), and results of state-mandated achievement tests. Data from the Language Proficiency Assessment Committee (LPAC) records prior to placement included results of language proficiency assessments, documentation of language dominance, the home language survey, and annual decisions about eligibility for special language programs (i.e., bilingual education and ESL). Data gathered from special education records included reasons for referral, interventions provided prior to referral, health/social histories and home information, instruments used in assessments, assessment results, and MDT eligibility determinations. Special education records also contained the time allocated for special education instruction and for speech and language therapy.

The FIS researchers created two additional data collection forms. The first was used to capture students' academic strengths and weaknesses from information contained in the special education records. The second form was used to develop a one-page summary of each student's school history and contained (a) the date the student initially qualified for special education, (b) the child's initial and current disability classification(s), (c) the dates and purposes of MDT meetings, (d) a chronology of the student's grade level placements and the school(s) attended, and (e) other pertinent information (e.g., retentions, significant breaks in schooling, school withdrawal dates).

Inter-coder agreement. Five University of Texas at Austin faculty members were trained to collect data by the FIS research coordinator. The research coordinator randomly

selected three participants from the FIS sample and each coder captured data from each of these students' cumulative, bilingual education and special education records. Each coder's completed data collection forms were checked for accuracy by the research coordinator. Inter-coder agreement was established at 90% or above for each data collection form. Although coders worked independently after reliability was established, if a coder had questions about how to code particular items, a second coder was asked to code that same information. If the two coders were unable to agree on how the information should be coded, coding was done by the research coordinator and then feedback was provided to the coders. Data were collected over six months beginning in June and continuing through December of 2000.

Preliminary analysis of FIS data revealed wide variation in students' classifications at initial entry into special education. This finding prompted the researchers to divide the participants into groups corresponding to their initial classification by district MDTs. These subgroups were: (a) ELLs with LD as their primary and only disability (Group I; $n=21$); (b) ELLs initially qualified for special education services in early childhood (Group II; $n=19$); (c) ELLs initially identified as both LD and SI (LD/SI) [Group III; $n=6$]; (d) ELLs initially identified as SI, and subsequently classified as LD/SI (Group IV; $n=5$); (e) ELLs initially identified as LD, and subsequently as SI (LD/SI) [Group V; $n=3$]; and (f) ELLs who did not fit into any other pattern (Group VI; $n=16$). Data for two of these subgroups have been analyzed. Wilkinson, Ortiz, Robertson and Kushner (2006) analyzed data for the 21 ELLs identified as having reading-related LD as their primary and only

disability (i.e., Group I). Liu (2006) analyzed data for 19 ELLs who initially qualified for special education services in early childhood (i.e., Group II).

LD*SI Study Procedures

This study targeted a third group of FIS participants, 14 Spanish-speaking ELLs with reading-related LD who were identified as SI prior to (n=5), at the same time as (n=6), or after (n=3) they were initially identified as having a reading-related LD (Groups III, IV, and V respectively, as described above). These students were not included in the Wilkinson et al. (2006) study or the Liu studies (Liu, 2006; Liu et al., 2008).

Research approval. An application describing the purpose of the LD*SI study, rationale, methodology, and the procedures for maintaining confidentiality was submitted to the UT Austin Institutional Review Board (IRB) for approval. The study qualified for the IRB exempt category because the FIS had previously been approved by the IRB, the LD*SI study involved a secondary analysis of the extant FIS database, and no new data were to be collected.

Confidentiality of data. All students in the LD*SI study were assigned identification numbers for the FIS study. No information that identifies the district, school, or students is attached to the data. The FIS database is maintained in secure files within the UT Austin Office of Bilingual Education.

LD*SI study participants. Eight males and six females (n=14) met criteria for inclusion in this LD*SI study; this represented (20%) of the total FIS sample. Eight of the students (57%) were born in the U.S. and six (43%) were born in Mexico. Eight students (57%) started school in pre-kindergarten and four (29%) started in kindergarten. Initial

school enrollment data were missing for two students (14%). The ages of the participants at the start of the study ranged from 7 to 12. When they were first identified with reading-related LD, six students were in first grade, three in second, four in third and one was in fourth grade.

Changes in disability classifications. Six students (43%) were initially identified as having LD and SI (LD/SI). Classification of eight other students (57%) in the LD*SI group changed after initial special education placement. Five of these eight were initially eligible as SI but were later identified as also having LD (SI/LD). Two students, initially classified as LD, were later eligible for speech and language services (LD/SI) and one student, initially identified as LD and Other Health Impaired, was subsequently identified as eligible for speech and language services (LD/OHI/SI).

LD*SI database design and data entry. The research questions were addressed using the archival FIS data from the cumulative, bilingual education, and special education records described previously. Data relevant to the research questions were entered into a Microsoft Excel (Microsoft Corporation, 2007) spreadsheet. This compilation consisted of all data available when the students were initially identified as having a reading-related LD and when they were initially identified as having SI by the participating district's MDTs.

Data analysis. Data analysis involved two phases. The first was an analysis of data related to student referral and assessment and MDT eligibility determinations. The second phase included analysis of recommendations made by a clinical judgment panel. The panel's decisions were then compared with the district's MDTs eligibility determinations.

District data analysis. Descriptive statistics, including frequencies, percentages, and means were used to summarize student demographic data related to referral, assessment and special education eligibility determinations. As necessary, codes were developed for analyzing qualitative data. For example, 31 reasons for referring students to special education were given. Similar reasons were grouped together and a label was assigned to the grouping. Reasons for referral such as “is easily distracted” and “does not pay attention” were collapsed into the broader category of attention problems; “can only identify a few letters” and “difficulty understanding text” were grouped under the category of “reading difficulties.” The researcher's dissertation supervisor reviewed the resulting categories and data assigned to each group; in cases of disagreement, consensus regarding the classification was reached. These data were then summarized to determine the most common reasons for referrals.

The researcher first described students' demographic characteristics, educational history, the reasons for referral and the number and types of interventions provided to students before special education referral. The district's evaluation procedures (e.g., language(s) of assessment, number and types of assessment instruments used) were then described and assessment results were summarized. Finally, information used by MDTs in making eligibility decisions and subsequent recommendations for special education services was analyzed.

Clinical judgment panel procedures. In the preliminary analysis of FIS data, researchers identified concerns about the appropriateness of the LD eligibility decisions made by district MDTs. This prompted them to establish a clinical judgment panel to

review data and to validate the appropriateness of eligibility decisions made for the FIS students by district MDTs. The present study followed the procedures used by the clinical judgment panel as described by Wilkinson, Ortiz, Robertson and Kushner (2006) and Liu, Ortiz, Wilkinson, Robertson and Kushner (2008).

The three clinical judgment panelists were bilingual special education faculty members. One panelist received a PhD in school psychology and two received PhDs in special education administration. The panelists averaged 24 years of experience in the bilingual special education field (range of 18 to 32 years). The panelists' research focused on ELLs with LD with an emphasis on distinguishing language and learning disabilities from linguistic and cultural differences.

The following research questions guided the panelists' review and decision-making:

1. Does the student qualify for special education as a student with a reading-related learning disability?
2. What significant factors documented in the student's archival records support a decision to qualify the student as having LD?
3. What expected information or processes are not documented?
4. Are the data presented sufficient to support the LD eligibility decision in light of the exclusionary clause?

Clinical judgment panel data analysis. The clinical judgment panel members individually reviewed all data and made an independent eligibility recommendation for each participant. Each panelist completed a data collection form developed by the

researcher and indicated whether, in their opinion, (a) the student qualified as having reading-related LD, (b) there was sufficient evidence in the student's records to support a potential disability category other than LD, or (c) the student did not qualify for special education. The panelists also explained the rationale for their eligibility recommendations.

Panelists were given three weeks to submit their eligibility determinations to the researcher. The researcher then tabulated the results to determine agreement among the panelists for all cases. Agreement indicated that all three members made the same eligibility recommendation. After the researcher tabulated the results, the panel members met as a group and reviewed these results. The researcher recorded the meeting and took notes to capture the panelists' discussions and decisions. The panelists reached a consensus decision for those cases in which 100% agreement was not obtained. The members discussed all cases and made eligibility recommendations for the 14 participants.

Clinical judgment panel results were compared with the district MDT eligibility determinations and factors that might explain differences in decisions were identified. Results of this analysis were then used to develop profiles of students in the LD*SI sample whom the panelists classified as having a reading-related LD, those for whom the panel suspected a disability other than LD, and students whom the panel believed did not qualify for services.

Limitations of Methodology

The findings of this study must be viewed with caution because of the small sample from one school district. Moreover, participants represented only one ELL subgroup, Spanish-speaking elementary-age ELLs, predominantly of Mexican descent who were

enrolled in bilingual education. Few other districts provide bilingual assessment or bilingual special education instruction; therefore, it would be important to replicate the study in other districts that offer this range of services. It would also be important to conduct similar investigations in districts that serve ELLs in English as a second language programs. Studies of special education services offered without the benefit of native language support are crucial for improving services, particularly for low incidence language groups.

The FIS data were compiled from school records that were not maintained for research purposes. The data in archival records may not reflect all information available to MDTs when they made eligibility determinations. Information in student records was sometimes incomplete and the actual deliberations of the MDT may not have been fully recorded. Written records may not provide insight into factors that influenced the decisions made by team members. In addition to record reviews, observation of students, pre-referral meetings, assessments and MDT meetings would have helped the researcher gain a clearer understanding of the processes involved in referral, assessment and eligibility determination for ELLs.

Finally, because they had reviewed records and conducted preliminary analysis of FIS data, panelists were privy to student data that were likely not available to MDTs. For example, panel members were familiar with the trajectory of students after initial special education placement, and this may have influenced their eligibility recommendations.

CHAPTER FOUR

Results

The study reported herein involved a subset of data from the Field Initiated Study (FIS), Bilingual Exceptional Students: Effective Practices for Oral Language and Reading Instruction, funded by the U.S. Office of Special Education and Rehabilitative Services (UT FIS, 2002). One purpose of the FIS was to develop profiles of 70 elementary-age Spanish-speaking English Language Learners (ELLs) identified as having reading-related learning disabilities (LD) in Spanish by the participating district's multidisciplinary teams (MDTs). This study focused on the 14 participants identified as having LD, who were also classified as having speech and language impairments (SI) before ($n=5$), at the same time as ($n=6$), or after ($n=3$) being classified as LD. This group will hereafter be referred to as the LD*SI group. Students identified as having SI prior to LD are referred to as SI \rightarrow LD, students identified as LD and SI at the same time are labeled as LD + SI, and students identified as LD prior to their SI classification are referred to as LD \rightarrow SI. Data for the LD*SI sample were analyzed to address the following research questions:

1. What were the characteristics of elementary-age, Spanish-speaking ELLs when they were initially identified as having reading-related learning disabilities by the participating district's multidisciplinary teams (MDTs)?
 - a. What were their demographic characteristics?
 - b. Why were they referred?
 - c. How were they assessed?
 - d. What were the assessment results?

- e. What was the nature of students' reading-related LD as determined by MDTs?
- 2. How did the clinical judgments of an expert panel regarding students' eligibility as having reading-related LD compare with the eligibility determinations of the participating district's MDTs?
- 3. What were the speech and language characteristics of the elementary-age Spanish-speaking ELLs when they were initially identified as SI by the participating district's MDTs?
 - a. What were their demographic characteristics?
 - b. Why were they referred?
 - c. How were they assessed?
 - d. What were the assessment results?
 - e. What was the nature of each student's speech and/or language impairment(s) as determined by MDTs?

A secondary analysis of archival FIS data from cumulative, bilingual education, and special education records was completed. Data were analyzed to describe students' demographic characteristics, language dominance and proficiency classifications, educational history, special education assessment practices and assessment results, as well as the decisions of MDTs. After examining available data, a clinical judgment panel made eligibility recommendations for each student; consensus decisions were then compared with those of district MDTs. Results of analysis of district data are presented first, followed by the clinical judgment panel results.

District Findings

Participant Characteristics

In addition to the sample characteristics described in Chapter Three, analysis of district data revealed supplementary information about participants' families.

Family membership. Information about family membership was available for 12 of the 14 LD*SI students. Families included 3-11 members, with an average of 5.4 persons per household. Nine students (75%) were from two-parent homes and three students (25%) were from single-parent homes, with the mother as the head of the household. Eleven students (92%) had siblings (range of 1 to 3; mean = 1.8); one (8%) student was an only child. Nine students lived with nuclear families (75%) and three (25%) with extended families (e.g., aunt, uncle, grandparents, cousin).

Parent education. Information about educational attainment was available for 20 parents, nine fathers and 11 mothers. Of the nine fathers, one (11%) had graduated from high school and one (11%) had no formal education. Four fathers (45%) had some high school education (i.e., to the ninth grade), one (11%) completed 6th grade, one (11%) completed middle school, and one father (11%) had attended second grade. Of the 11 mothers, two (19%) were high school graduates and one (9%) had no formal education. Four (36%) had some high school education (i.e., between ninth and eleventh grades) and four mothers (36%) had attended elementary school (i.e., from initial school entry to the third or fourth grade).

Parent occupation. Information about parent occupation was available for 20 parents, 10 fathers and 10 mothers. Five fathers (50%) worked in the service industry

(e.g., painting, restaurant, repairman), four (40%) worked in construction, and one father was (10%) a ranch-hand. Four mothers (40%) worked in the service industry (e.g., housekeeping, daycare), two (20%) were factory workers and one mother (10%) worked in the retail industry. Three mothers (30%) did not work outside of the home.

Language Classification

Standardized language proficiency tests were administered to students whose families spoke a language other than English at home to determine whether students were eligible to enroll in bilingual education programs [TEC § 29.056(2)]. To receive special language program support, students had to qualify as limited English proficient. The participating district also assessed students' native language proficiency.

Language proficiency tests administered. The IDEA Oral Language Proficiency Tests I (IPT I; Dalton, Amori, Ballard & Tighe, 1991) and the Spanish IDEA Language Proficiency Test (IPT I; Dalton, 1991) were used by the participating district to determine special language program eligibility for the LD*SI sample. Twelve of the 14 students for whom language proficiency data were available were assessed with both the English IPT I and the Spanish IPT I. The district also used the Language Assessment Scales-Oral (LAS-O; De Avila & Duncan, 1990). The three language proficiency tests are briefly described below.

IPT I (English version). The IPT I (Dalton et al., 1991) assesses the vocabulary, comprehension, syntax and verbal expression of students in kindergarten through sixth grade. The test is comprised of six levels, A through F. Results are used to assign a classification of non-English speaking (NES), limited English speaking (LES) or fluent

English speaking (FES). The IPT I norming sample was comprised of 1,054 students from eight states, including Texas. Spanish-speaking ELLs ($n=559$; 53%) and native English speakers ($n=315$; 30%) represented the majority of the norming sample. The internal reliability coefficient of the instrument was reported as .99. Criterion-related validity was based on teacher ratings of oral language proficiency. When teachers' ratings were compared to English results of the IPT I, correlations of .72 and .75 were found for forms C and D, respectively.

Spanish IPT. Dalton (1991) developed a Spanish version of the IPT to compare Spanish-speaking ELLs' oral language proficiency with results attained from the English IPT. The format of the Spanish version matched that of the English IPT, but it was developed for students in kindergarten through eighth grade. The Spanish IPT I norming sample was comprised of 480 bilingual (Spanish/English) students in Texas and California, described as 472 Hispanics (98%), seven Whites (1.5%) and one Black (.05). Internal consistency reliability was measured at .99. A bilingual was defined as someone who is skilled to some degree in two languages.

Language Assessment Scales-Oral (LAS-O). The LAS-O (De Avila & Duncan, 1990) assesses vocabulary, listening comprehension, and story retelling skills of students in grades 1-6. Test results are used to classify a student as a non-proficient, limited English speaker or proficient English speaker. The LAS-O was nationally normed on 1,671 students from nine states; 585 students were from Texas (35 %). Spanish was the primary language spoken in the home of 61% percent of the sample ($n=1,091$). English was the primary language spoken in the home for 33% ($n=551$). Inter-rater reliability

coefficients ranged between .32 and .43 in listening comprehension for form C and D respectively. Inter-rater reliabilities were in the high .80s and low .90s for all other subscales. Internal reliability coefficients ranged from .87 to .88 for form C and from .87 to .88 for form D.

Language assessment results. All students were classified as non-English-speaking. Eleven of the 12 students (92%) were classified as limited Spanish-speaking and one (8%) was classified as non-Spanish-speaking.

Language dominance. The students' language proficiency test scores in the primary language were compared to their English scores to determine language dominance. A student's dominant language is the language the student understands and speaks more effectively relative to the other language (Ortiz & Garcia, 1990). The classification system used by the district was based on the Lau categories of language dominance (cited in Reynolds & Fletcher-Janzen, 2004). Each of the Lau categories represents a language dominance classification, ranging from monolingual speaker of a language other than English (Lau Category A) to monolingual speaker of English (Lau category E).

Table 4.1 presents the Lau categories for Spanish speakers.

Table 4.1
District Categories of Language Dominance

Lau Categories	Description	Label
A	Monolingual speaker of a language other than English	Spanish monolingual
B	Speaks mostly a language other than English, but speaks some English	Spanish dominant
C	Speaks both English and another language	Bilingual Spanish/English
D	Speaks mostly English but speaks some of another language	English dominant
E	Monolingual English speaker	English monolingual

Twelve participants (86%) were classified as Spanish monolingual (Lau category A) and two (14%) were classified as Spanish dominant (Lau category B) at initial school entry. Thus, all students met eligibility criteria for bilingual education.

Characteristics of Students with Learning Disabilities

Language Classification

Table 4.2 presents language dominance and proficiency classifications for nine students at initial entry into bilingual education and at the time of their LD assessment. To maintain anonymity, students are referred to by the number assigned to them by the FIS researchers.

Five (56%) students who were initially classified as Spanish monolingual (Lau category A) changed classifications. Four of them (1503, 7202, 3407 and 1511) were reclassified as Spanish dominant (Lau category B) and one (9407) was reclassified as English dominant (Lau category D). However, the language proficiency of two students (1503, 7202) was changed without a reevaluation of language proficiency. Three students

(1210, 4404 and 6401) continued to be classified as monolingual Spanish speakers and one (5401) as Spanish dominant.

The language proficiency of seven students was reevaluated using the English IPT I (Dalton et al., 1991) and the Spanish IPT I (Dalton, 1991). One of these seven was also tested with the English version of the LAS-O (De Avila & Duncan, 1990). As shown in Table 4.2, five of the seven students (3407, 9407, 1210, 4404, 6401) continued to be classified as limited Spanish speaking. One student's (1511) classification changed from limited to non-Spanish speaking and one student (5401) was reclassified as fluent Spanish speaking. Five of the seven students (3407, 1511, 1210, 4401, 6401) remained classified as non-English speaking; two (9407, 5401) were reclassified as limited English speaking. Because there had been no reevaluation of their proficiency, the English proficiency of students 1503 and 7202, as well as their eligibility status, were unclear. All students continued to meet eligibility criteria for bilingual education services.

Table 4.2

Changes in Language Status between Entry into the Bilingual Education Program and at LD Assessment

Students	Spanish language proficiency classification		English language proficiency classification		Dominant language	
	Program entry	LD assessment	Program entry	LD assessment	Program entry	LD assessment
1503, 7202	LSS	n/a	NES	n/a	A	B
3407	LSS	LSS	NES	NES	A	B
1511	LSS	NSS	NES	NES	A	B
9407	LSS	LSS	NES	LES	A	D
1210, 4404, 6401	LSS	LSS	NES	NES	A	A
5401	NSS	FSS	NES	LES	B	B

Note. n/a = student's language proficiency was not reevaluated. NES = non-English speaking; LES = limited English speaking; NSS = non-Spanish speaking; LSS = limited Spanish speaking; FSS = fluent Spanish speaking. A = Spanish monolingual; B = Spanish dominant; D = English dominant.

At the time of their LD assessments, seven students (50%) had been administered language proficiency tests within one year or less; five were reassessed for language proficiency within six months and two were tested between seven months and one year. Five students (36%) had been administered language proficiency tests more than one year before the time of their LD assessment. Of these, the language proficiency scores of three were from 18 months to two years old, and the language proficiency scores of two were more than two years old. Language proficiency data were not documented for two students (14%).

Grade Progression

Students who meet grade-level achievement standards are promoted to the next grade level; those who do not are retained or are socially promoted or “placed” in the next grade level. At the time they were initially identified as LD, three students (25%) had been

promoted every year; the other nine students (75%) had been placed at least once. Grade progression data were not available for two students. One of the nine students was retained once and placed twice. Four students were placed once, three were placed twice and one was placed three times.

Early Intervention

Interventions prior to LD referral. Teachers provided information about pre-referral interventions in two different sections of the Student Information Form (SIF). In the programming options section, teachers indicated that they considered compensatory education for two students, group counseling for three, tutoring for five, and a “30 minute literacy group” for one student. In the modifications/strategies section, teachers documented that tutoring ($n=8$) and two reading interventions, Reading Recovery ($n=3$) and Estrellitas ($n=1$), had been provided (Clay, 1993; Myer, 1990).

Problem-solving meetings. Per district policy, teachers could request assistance from a problem-solving team in designing strategies to address students’ academic and/or behavioral difficulties. Information about problem-solving meetings was available for five (36%) students. Teams recommended that one student be served in a specialized reading group; one student’s teacher was asked to “work more with the child”; another teacher was told to “focus on letter-sound correspondence.” The problem-solving team recommended that two students be referred to special education.

There were inconsistencies in teachers’ classifications of modifications/strategies attempted. For example, teachers placed “reduced assignments” in three different categories on the SIF: as alteration of assignments, as modification of instruction, and as

adaptation of classroom materials. For consistency, the researcher coded interventions listed under different categories in the category she considered most appropriate. For example, interventions described as "reduced assignments" were coded under "modifications of assignments." This resulted in the following classifications: (a) *adaptations of classroom materials* included simplified text and/or assignments; (b) *alteration of assignment* included reduced assignments, extra time for completing assignments, providing copies of notes taken in class, and repeating, restating and simplifying verbal instructions; (c) *modification of instruction* involved instruction provided at a student's instructional, rather than grade, level; (d) *grading adaptations* included grades based on completed work, effort or instructional level; (e) *behavior management* included counseling and behavior improvement plans; and (f) *physical and/or adapted equipment* included specialized pens and modified writing paper (e.g., raised-lined and/or larger sized paper). Table 4.3 presents the interventions provided the students in each of the LD*SI subgroups.

Table 4. 3

*Number of Interventions Provided to LD*SI Subgroups Prior to LD Referral*

	SI → LD	LD + SI	LD → SI	
Categories	(n=4)	(n=6)	(n=3)	Total
Alteration of assignments	4	4	1	9
Grading adaptations	2	4	3	9
Adaptation of materials	2	3	2	7
Modification of instruction	2	2	1	5
Behavior management	0	2	1	3
Physical/adapted equipment	0	1	1	2
Total	10	16	9	35

Note. Students received more than one intervention.

Each student received an average of 2.7 interventions prior to referral, with a range of 1 to 5. The most common pre-referral interventions were alteration of assignments ($n=9$), grading adaptations ($n=9$), and adaptation of materials ($n=7$).

Referral Information

Grade at referral. Teachers referred 11 students to special education; three were referred for a Full and Individual Evaluation (FIE) by the MDT for the purpose of determining whether the student qualified as LD. Table 4.4 presents student grade at LD referral. First grade was the most common referral grade ($n=6$), followed by referrals at 2nd grade ($n=5$).

Table 4.4
*Grade at LD Referral in the LD*SI Subgroups*

Grade	SI → LD <i>n</i>	LD + SI <i>n</i>	LD → SI <i>n</i>
1	1	4	1
2	2	1	2
3	1	1	0
4	1	0	0

Reasons for referral. Teachers gave 31 reasons for referring ELLs to special education; the researcher organized these into categories of related behaviors. With the exception of problems related to expressive language, all but one of the reasons for referral were related to academic and/or behavior issues. Academic concerns were of three types: (a) general academic problems such as difficulty retaining information, slow development of academic skills and weak concept development; (b) language/literacy difficulties; and (c) math problems. Behavior-related reasons for referral involved two types of problems: (a) general behavioral issues such as student does not follow classroom rules, is disruptive, or is disorganized; and (b) attention problems such as easily distracted and difficulty sustaining attention.

Teachers' reasons for referral are presented in Table 4.5. Nine (82%) of the 11 students for whom information was available were referred for two or more reasons. The most common teacher concerns were related to reading ($n=7$ students) and general academic problems ($n=7$ students), followed by math ($n=5$ students) and general behavior problems ($n=5$ students).

Table 4.5
Teachers' Reasons for the Referral of ELLs at Initial LD Identification

Reason for referral	Students <i>n</i>	Total no. of interventions %
General academic problems	7	23
Language/literacy		
Reading	7	23
Writing problems	3	10
Language arts	1	3
Math	5	16
Behavior		
General behavior problems	5	16
Attention problems	2	6
Expressive language problems	1	3
Total	31	100

Note. Students were referred for more than one reason.

Language- and literacy-related problems were the most common reasons for referral, with reading problems cited most often. General behavior problems were the most common reason for referral in the behavior category.

Assessment for LD Eligibility

At the time of this study, the primary criterion used in Texas to classify students as LD was a severe discrepancy (over one standard deviation) between the results of an individually administered standardized intelligence test and a standardized achievement test [19 TAC § 89.1040 (c) (9)]. The following section describes assessment procedures,

including tests used and the results of IQ and achievement testing to determine the presence of a significant disability for participating students.

Assessment of Intelligence

Intelligence tests. District assessment personnel administered one of the following three instruments to assess students' IQ: the Comprehensive Test of Nonverbal Intelligence (CTONI; Hammill, Pearson & Wiederholt, 1996), the Kaufman Assessment Battery for Children (K-ABC; Kaufman & Kaufman, 1983), or the Wechsler Intelligence Scale for Children-Third Edition (WISC-III; Wechsler, 1991). Nine students (64%) were assessed with the CTONI, four (29%) with the Kaufman ABC, and one (7%) with the WISC III. The four students assessed with the K-ABC were administered the Nonverbal Scale.

Comprehensive Test of Nonverbal Intelligence (CTONI). The CTONI (Hammill, et al., 1996) is an individually administered test of nonverbal reasoning for individuals ages 6 to 90. The CTONI is subdivided into two scales, the Geometric Nonverbal Intelligence Quotient (GNIQ) and the Pictorial Nonverbal Intelligence Quotient (PNIQ). Scores from these two scales are aggregated to obtain a Nonverbal Intelligence Quotient (NIQ). Both scales assess analogical, categorical and sequential reasoning, one with abstract geometric designs and the other with pictures of familiar objects (e.g., animals, people, houses). The student is required to select and point to the correct response from an array of choices. The CTONI was normed on a sample of 2,129 students, 212 Hispanics (9%), 1703 non-Hispanic Whites (79%), and 234 African-Americans (11%). The sample was stratified, based on data from the 1990 Census for sample parameters, according to racial/ethnic representation, family income, educational attainment and geographic region

including Texas. Language proficiency was not a stratification variable. Test-retest reliability was above .90 for the GNIQ and PNIQ, and above .95 for the Nonverbal Intelligence Quotient. Coefficient alphas for the six subtests were above .90's. The concurrent validity coefficients between the Wechsler Intelligence Scale for Children-Third Edition (WISC-III; Wechsler, 1991) and the CTONI were .59, .56 and .76 between the Verbal IQ and the PNIQ, GNIQ and NIQ, respectively and .51, .55 and .70 between the Performance IQ and the PNIQ, GNIQ and NIQ, respectively (McCallum et al., 1998).

Kaufman Assessment Battery for Children (K-ABC). Normed on children 2 years, 6 months to 12 years, 5 months, the K-ABC (Kaufman & Kaufman, 1983) measures children's cognitive and academic functioning. The intelligence scales assess children's reasoning, memory and organizational skills in two different contexts: when a stimulus is presented sequentially (sequential processing) and when it is given all at once (simultaneous processing). The Sequential Processing and Simultaneous Processing Scales are combined to form the Mental Processing Composite (MPC), a global estimate of cognitive functioning (Valencia & Suzuki, 2001). Participants in this study were administered a shorter version of the MPC, the Nonverbal Scale. This scale is also considered a global measure of intelligence and may be administered in pantomime for ELLs and children with language impairments. The Nonverbal Scale contains five subtests from the Simultaneous Processing Scale (i.e., spatial memory, gestalt closure, photo series and matrix analogies) and the hand movement subtest from the Sequential Processing Scale. The K-ABC was standardized and normed on a sample of 2,000 children. It was designed to match the 1980 U.S. Census, but Hispanic Americans were underrepresented

by 24% and African Americans with limited education were underrepresented by 10% (Sattler, 2001). Internal consistency reliability was above .85 for the Nonverbal, Simultaneous and the Sequential scales. Test re-test reliability was .88 for the MPC; test-retest reliability was not reported for the Nonverbal Scale. Construct and concurrent validity for the MPC were assessed in 43 correlation studies using existing achievement, intelligence and ability tests. For example, in a study of 283 regular education students, (Valencia & Suzuki, 2001), the concurrent validity coefficients between the Full Scale IQ score of the Wechsler Intelligence Scale for Children-Revised (WISC-R; Wechsler, 1974) and the MPC was .80. Information on concurrent validity for the Nonverbal Scale was not available in the technical manual.

The Wechsler Scale for Children-Third Edition (WISC-III). Normed on native English-speaking children ages 6 to 16, the WISC-III (Wechsler, 1991) measures students' cognitive abilities with 13 subtests divided into a Verbal Scale and a Performance Scale. Scores from these two scales are aggregated to obtain a Full Scale IQ score. The Verbal Scale assesses verbal knowledge and understanding with the information, similarities, vocabulary and comprehension subtests, and the auditory memory, concentration and quantitative reasoning with the arithmetic and digit span subtests. The Performance Scale includes picture completion, picture arrangement, block design and object assembly to assess the ability to interpret and organize visually perceived information within a time limit. Two subtests of the Performance Scales, coding and symbol search, measure the ability to process visual information rapidly. The WISC-III was normed on a sample of 2,100 children of whom 250 (12%) were Hispanic (Flanagan, McGrew & Ortiz, 2000).

The internal consistency reliability for the Verbal Scale is above .93, for the Performance Scale is above .89 and for the Full Scale IQ is above .94. Test-retest reliability based on a sub-sample of 353 subjects was .95 for the Full Scale IQ, .94 for the Verbal Scale and .88 for the Performance Scale.

The concurrent validity coefficients between the Mental Processing Composite of the K-ABC (Kaufman & Kaufman, 1983) and the WISC-III were .70 for the Full Scale IQ, .55 for the Verbal Scale, and .66 for the Performance Scale (Flanagan et al., 2000).

Results of IQ testing. Thirteen of 14 students were administered nonverbal IQ tests. Scores ranged from 82 to 94, all within the average to low-average range, and had a mean of 89. Of the 13 assessed with nonverbal scales, seven (50%) had standard scores in the 90s (mean=90) and six (43%) had standard scores in the 80s (mean=85). The student tested using a verbal scale, the WISC III, received a standard IQ score of 94. Of the nine students assessed with the CTONI, five received standard scores in the 90s (mean=93), and four obtained standard scores in the 80s (mean=84). Of those tested with the nonverbal composite of the K-ABC, two received a standard score of 93 and two obtained a standard score of 86.

Assessment of Achievement

Achievement tests. Three Spanish achievement tests were administered to establish eligibility: the Spanish version of the Woodcock Language Proficiency Battery-Revised (Woodcock & Muñoz-Sandoval, 1995), the Batería Woodcock-Muñoz Pruebas de Aprovechamiento-Revisada (Woodcock & Muñoz-Sandoval, 1996), and the Batería Woodcock Psico-Educativa en Español (Woodcock, 1982). The Woodcock-Johnson Tests

of Achievement Battery-Revised (Woodcock & Johnson, 1989) was used to assess achievement in English.

Woodcock-Johnson Tests of Achievement-Revised. The Woodcock-Johnson Tests of Achievement (WJ-R; Woodcock & Johnson, 1989) assess individuals ages 2 to 90, in the areas of reading, math, written language and general knowledge. Depending on the purpose or extent of the assessment, the 14 individual tests may be grouped to measure a broad set of skills in a subject area (e.g., *broad* reading cluster) or to provide a more in-depth diagnostic assessment (e.g., *basic* reading skills cluster). These clusters, or groupings of tests “are the primary source of interpretive information” (Mather & Woodcock, 2001, p. 2). The WJ-R was standardized on a stratified sample of over 5,602 individuals. Fifty-seven percent of students ($n=3,213$) in the sample were in kindergarten through 12th grade. The majority of students were described as White (84%) and 8% were described as Hispanic. Internal consistency reliability for the 11 subtests administered to younger students ranged from .77 on writing samples to .98 on passage comprehension. Internal consistency reliability was above .85 for all cluster scores. Test-retest reliability was above .90 for the Broad Reading and Basic Reading Cluster Score. Inter-rater reliability was above .90.

Woodcock Language Proficiency Battery-Revised (Spanish form). The Spanish form of the Woodcock Language Proficiency Battery-Revised (WLPB-R; Woodcock and Muñoz-Sandoval, 1995) is comprised of 11 individually administered tests that assess oral language, reading and written language achievement of individuals ages 2 to 90. A standard score is obtained for each test (e.g., passage comprehension) and a cluster score

is obtained by aggregating results of two or more tests. For example, the letter-word identification test (*identificación de letras y palabras*) and the passage comprehension test (*comprensión de textos*) are used to obtain the broad reading (*lectura amplia*) cluster score. Results from the letter-word identification test and the word attack test (*análisis de palabras*; decoding nonsense words) are combined to get a measure of basic reading skills (*destrezas básicas en lectura*). As can be seen in these descriptions, the same test may be used in calculating different cluster scores.

The cumulative results of the dictation test (i.e., *dictado*; spelling, punctuation and usage) and writing samples test (i.e., *muestras de redacción*; writing passages when given pictorial prompts) are used to assess broad written language (*amplia lenguaje escrita*); basic writing skills (*escritura básica*) combines the dictation and proofing tests (i.e., *corrección de textos*; identifying incorrect usage, spelling or punctuation in a passage and then correcting it). District personnel did not use the oral language assessment.

The WLPB-R (Spanish form) was standardized on 3,911 native Spanish speakers of whom 1,512 (38%) were tested in Mexico, 1,325 (34%) in the United States (i.e., Texas, Arizona, California, Florida, New York and Florida), 634 (16%) in Puerto Rico, 196 (5%) in Peru, 128 (4%) in Spain and 116 (3%) in Costa Rica. The Spanish scores were calibrated so that the English norms could be used with the Spanish test. As a result, the English and Spanish test versions are based on one set of norms. Internal consistency reliability coefficients for the cluster scores are in the .90s (Ponton & Carreon, 2001).

The Batería Woodcock-Muñoz: Pruebas de Aprovechamiento-Revisada. The Batería-R (Woodcock & Muñoz-Sandoval, 1996) is comparable to the content and the

structure of the Woodcock-Johnson Tests of Achievement-Revised (Woodcock and Johnson, 1989) and assesses the areas of reading, math, written language and general knowledge of native Spanish speakers, ages 2 to 90. The reading and written language sections of the Batería-R are the same as those in the academic sections of the Spanish version of the WLPB-R. General mathematics achievement can be measured using the Broad Math cluster (*amplia matemáticas*), an aggregate of calculation (i.e., *cálculo*; mathematical computations) and applied problems (i.e., *problemas aplicados*; solve and analyze math problems) tests. The Batería-R was standardized on just over 2,080 native Spanish speakers from the United States ($n=686$; 33% of total sample) and native speakers from the same five countries as those used in the norming of the WLPB-R ($n=1325$; 34% of Spanish-speaking sample). As with the WISC-R, the data from the Batería-R were calibrated so that the norms for the WJ-R could be used with the Batería-R. The internal reliability coefficients for the reading subtests and the cluster scores are in the .90s (Ponton & Carreon, 2001).

Batería Woodcock Psico-Educativa en Español. The Batería Woodcock Psico-Educativa en Español (Woodcock, 1982) is a direct translation of the Woodcock Psycho-Educational Battery in English (Woodcock, 1979) and is used to assess the cognitive and academic achievement of native Spanish speakers. It consists of 10 cognitive and seven achievement subtests (Ponton & Carreon, 2001). The cognitive portion assesses broad cognitive ability, oral language, reasoning, auditory processing, visual-perceptual speed and spatial visualization. The achievement portion assesses reading, mathematics and written language. The Batería Woodcock Psico-Educativa en Español was standardized on

802 native Spanish speakers from urban areas in Costa Rica, Mexico, Peru, Puerto Rico and Spain. Internal consistency reliability was in the .90s for written language and between the .80's and 90's for reading and math (Ponton & Carreon, 2001).

Achievement results. All participants were given achievement tests in reading, math and written language. Eight students (57%) were administered the Bateria Woodcock-Munoz: Pruebas de Aprovechamiento-Revisada (Bateria-R), while four others (29%) were tested with the Spanish form of the Woodcock Language Proficiency-Revised (WLPB-R) and the mathematics subtests of the Bateria Woodcock Psico-Educativa (1982). One (7%) student was administered both the Bateria-R and the WJ-R and one (7%) was tested with the WJ-R only. Hence, the most frequently used test was the Bateria-R ($f=9$; 47%) followed by the Spanish form of the WLPB-R ($f=4$; 21%), the Bateria Woodcock Psico-Educativa ($f=4$; 21%) and the WJ-R ($f=2$; 11%).

To facilitate understanding of the results of achievement testing, Table 4.6 presents the achievement clusters and the tests that comprise those clusters. Spanish reading achievement scores are presented in Table 4.7. Both individual test scores and cluster scores are presented.

Table 4.6
*Achievement Clusters and Component Tests/Subtests^a of the Woodcock Instruments Used in the LD*SI Study*

Achievement Cluster	Component tests/subtests ^a		
Broad reading	Letter-word identification	+	Passage comprehension
Basic reading	Letter-word identification	+	Word attack
Broad written language	Writing samples	+	Dictation
Basic writing skills	Dictation	+	Proofing
Broad mathematics	Calculation	+	Applied problems

Note. Clusters correspond to the following achievement tests: Batería Woodcock Psico-Educativa en Español, Batería Woodcock-Munoz; Pruebas de Aprovechamiento-Revisada, Woodcock Language Proficiency Battery-Revised and the Woodcock-Johnson Tests of Achievement-Revised.

^a Subtests are used to comprise clusters only in the Batería Woodcock Psico-Educativa en Español.

English reading achievement standard scores for the two students tested with the WJ-R ranged from 44 to 70, with means of 54 on the broad reading cluster, 55 on letter-word identification and passage comprehension, and 67 on work attack. One of the two students also received a standard score of 72 for basic writing, 75 for broad math, 81 for applied problems and 76 for calculation. Achievement scores for the Spanish achievement tests are shown in Table 4.7.

Table 4.7

*ELLs' Achievement Scores for Spanish Achievement Tests Used in LD*SI Study*

Domains	Participants	Standard Score	
		Range	Mean
Reading Cluster Scores			
Broad reading cluster	12	33-70	57
Basic reading cluster	5	56-70	62
Individual Test Scores			
Letter word identification	12	48-76	65
Word attack	4	53-64	57
Passage comprehension	12	26-77	57
Writing Cluster Scores			
Broad written language	12	36-86	57
Basic writing skills	1	-----	61
Individual Test Scores			
Dictation	12	30-78	61
Writing samples	11	27-92	61
Proofing	2	71-81	76
Math Cluster Score			
Broad math cluster	13	58-89	78
Individual Test Scores			
Applied problems	9	65-90	76
Calculation	9	65-107	86

Note. Clusters correspond to the following achievement batteries: Batería Woodcock Psico-Educativa en Español, Batería Woodcock-Munoz; Pruebas de Aprovechamiento-Revisada, Woodcock Language Proficiency Battery-Revised

Significant IQ-achievement discrepancies. As indicated in Table 4.8, all students met the discrepancy criterion. The majority ($n=10$; 71%) had discrepancies of two standard deviations or more in basic reading. Seven of these students (70%) qualified in reading comprehension and six of nine (67%) who met LD eligibility criteria in written

expression had discrepancies of two standard deviations or more. Discrepancies in math were smaller, within one to two standard deviations between IQ and math reasoning or math calculation.

Table 4.8

IQ/Achievement Discrepancies

IQ/achievement discrepancy range	Basic reading <i>n</i>	Reading comprehension <i>n</i>	Written expression <i>n</i>	Math reasoning <i>n</i>	Math calculation <i>n</i>
45-59	2	3	2	0	0
30-44	8	4	4	0	0
16-29	4	3	3	5	3

Achievement measures used to establish IQ achievement discrepancies. The achievement clusters or individual tests used to establish the IQ-achievement discrepancies were not explicitly identified. Thus, in an attempt to determine the scores used by the district to establish the presence of a significant discrepancy, the researcher subtracted each individual's IQ score from each achievement score as reported on their respective FIEs. The scores were then checked to see if they matched the discrepancies reported on each student's eligibility report.

Reading achievement scores used to calculate discrepancies are shown in Table 4.9. To establish special education eligibility, assessment personnel used cluster scores in basic reading for all students. Cluster scores in reading comprehension were used for eight students, while individual tests were used for two. Seven students qualified in basic reading, seven in basic reading and reading comprehension, and three in reading

comprehension alone. Of the students who qualified in basic reading (i.e., those listed in the first column of Table 4.9), for reading comprehension, the Spanish broad reading cluster was used in one case and the Spanish passage comprehension test was used in the other two cases. Cluster scores were frequently used to establish LD eligibility. The same cluster score (i.e., Spanish broad reading) was used to establish eligibility in both basic reading and reading comprehension for half of the participants.

Table 4.9

Reading Achievement Measures Used to Calculate IQ/ Discrepancies

Achievement Measures	Basic reading <i>n</i>	Basic reading and reading comprehension <i>n</i>	Reading comprehension <i>n</i>
Spanish			
Broad reading cluster	2	7	1
Basic reading cluster	4	0	0
Passage comprehension test	0	0	2
English			
Basic reading cluster	1	0	0

Note. Two different measures were used to establish reading-related LD eligibility in basic reading for 2 students and reading comprehension for one student.

Cluster scores were used as evidence of a significant discrepancy for eight of nine students (89%) in written expression. The broad written language cluster was used to calculate the discrepancy for seven students, and the basic writing skills cluster was used to calculate the discrepancy for one. An individual test score in proofing was used to calculate the discrepancy for one student.

Cluster scores were most frequently used to establish eligibility in math-related areas ($f=5$; 63%). The broad math cluster score was used to calculate the IQ/achievement discrepancy for three students; two in math reasoning and math calculation and one in

math reasoning only. The applied problems test was used to calculate the discrepancy for two students in math reasoning, and the calculation test was used to determine the discrepancy for one of these two in math calculation.

Areas of LD eligibility. All 14 students met the IQ achievement criterion in on or more areas: 14 qualified in basic reading, 10 in reading comprehension, nine in written expression, five in math reasoning, and three in math calculation. With the exception of math, the magnitude of discrepancies was two or more standard deviations. Discrepancies in math were smaller, ranging from 16 to 29 points.

Table 4.10
*LD Areas in which LD*SI Subgroups Met LD Eligibility Criteria*

LD disability areas	SI \rightarrow LD (<i>n</i> =5)	LD + SI (<i>n</i> =6)	LD \rightarrow SI (<i>n</i> =3)	Total
Basic reading	5	6	3	14
Reading comprehension	2	6	2	10
Written expression	3	4	2	9
Math calculations	0	2	1	3
Math reasoning	2	2	1	5

Table 4.11 presents LD areas in which each of the 14 students met eligibility criteria. One student qualified in basic reading only; all others qualified in two or more areas. Of the latter (*n*=13), nine qualified in three or more areas. The largest number of students qualified in basic reading, reading comprehension and written expression (*n*=4) and in basic reading and reading comprehension (*n*=3).

Table 4.11

LD Areas in which ELLs Met Eligibility Criteria

LD eligibility areas	Participants
Basic reading, reading comprehension, written expression math calculation and math reasoning	2
Basic reading, reading comprehension, math calculation and math reasoning	1
Basic reading, written expression and math reasoning	2
Basic reading, reading comprehension and written expression	4
Basic reading and written expression	1
Basic reading and reading comprehension	3
Basic reading	1
Total	14

Difference between reasons for referral and LD eligibility. There were discrepancies between the reasons for referral and the achievement areas in which students were identified as LD (see Table 4.12.). For example, two students, 1503 and 1511, were referred for reading and math difficulties, but not for problems in writing. Both qualified as having writing-related LD; interestingly, 1511 did not qualify as having math LD.

Table 4.12

Differences between Reasons for Referral and Eligibility Documented on FIEs

Student	Reasons for referral	Eligibility on FIEs
1503	Reading and math	Reading, math and written expression
1511	Reading and math	Reading and written expression
4206	Behavior	Reading and math
6401	Reading and behavior	Reading, written expression and math

Note. There are two LD-related areas of eligibility for reading-related LD (basic reading and/or reading comprehension) and math-related LD (math calculation and/or math reasoning).

Eligibility Determinations

Differences in interventions reported. There were discrepancies between the interventions reported by teachers on the Student Information Form from those reported by MDTs at the eligibility determination meeting. MDTs documented pre-referral interventions in the “alternatives considered/provided” section of the student’s special education eligibility determination report. Seven students (50%) were provided modifications; one of these seven also received academic remediation and tutorials. One student (7%) had alternative instruction in a self-contained classroom and one (7%) received instruction in a resource classroom with special education supplementary education services. Five students (36%) were provided instruction in bilingual special education (BSE) classrooms.

Eligibility decisions. Multidisciplinary teams determined that all students met the legal criteria for classification as LD based on the Texas IQ-achievement discrepancy formula. Of the 14 participating students, five students (36%) were already classified as SI at the time of LD testing; because they qualified as LD, their classification was changed to LD/SI (i.e., the SI → LD subgroup). Six (43%) were identified as having LD and SI at initial admission to special education. Of the remaining three students (21%), two were initially identified as LD, and one was identified as LD and Other Health Impaired (LD/OHI) because of an attention deficit/hyperactivity (ADHD) diagnosis. These students were subsequently evaluated for, and qualified as SI. They constitute the LD → SI subgroup. Table 4.13 summarizes participants’ classifications.

Table 4.13

*Multidisciplinary Team Eligibility Determinations for LD*SI Students by Subgroup*

LD*SI subgroup	Areas of Eligibility for LD Services			
	Reading <i>n</i>	Reading and math <i>n</i>	Reading and written expression <i>n</i>	Reading, math and written expression <i>n</i>
SI → LD	2	0	1	2
LD + SI	1	1	3	1
LD → SI	1	0	1	1

Services after initial eligibility LD determination. Information about special education classroom placement was available for 13 of 14 students. MDTs recommended that 10 students (77%) receive BSE instruction in reading, language arts and math; three of these 10 to receive additional BSE services to reinforce instruction previously taught (i.e., re-teaching). Two other students (15%) were to be provided BSE classroom instruction for reading and language arts, and one student (8%) was to receive BSE classroom instruction for reading and math.

Data indicated that the 14 students in the sample spent an average of 2 hours, 45 minutes per day in a BSE classroom, (a range of 1 hr, 30 minutes to 3 hours, 30 minutes per day). Nine students (64%) spent three hours in BSE classes per day. There were differences in the amount of BSE instruction by subgroup. The SI → LD subgroup ($n=5$) received an average of 3 hours, 6 minutes per day of instruction in the BSE classroom, the LD + SI students ($n=6$) received 2 hours, 35 minutes, and the LD → SI students ($n=3$) averaged 2 hours, 30 minutes of BSE support.

Characteristics of Students with Speech and Language Impairments

In this section, results related to the initial identification of participants as having speech and language impairments are presented. Age and grade at SI classification are described first, followed by student's language status, results of analyses of referral information, speech and language assessments, and finally, eligibility determinations.

Language Proficiency Classifications

The language proficiency status of nine of the 14 students (64%) changed from the time of initial school entry to the point of SI assessment. Table 4.14 shows language dominance and proficiency classifications for these nine students. Four (44%) students' language dominance classifications changed: three (1503, 7202, 1511) to Spanish dominant (Lau category B) and one (6401) to English dominant (Lau category D). The other five students' (56%) language dominance classifications remained the same: four (1210, 1508, 3407, 4404) as monolingual Spanish (Lau category A) and one (5401) as Spanish dominant (Lau category B). However, the language dominance classification of two of the students (1503 and 7202) was changed even though their language skills were not reassessed.

The seven students whose language proficiency was reevaluated were given the English IPT I (Dalton et al., 1991) and the Spanish IPT I (Dalton, 1991); one of the seven was also tested with the English version of the LAS-O (De Avila & Duncan, 1990). As shown in Table 4.14, four of seven students (1210, 1508, 3407, 4404) continued to be classified as limited Spanish speaking. The Spanish language proficiency classifications of

two students (1511, 6401) changed from limited to non-Spanish speaking and one student was reclassified as fluent Spanish speaking. Six of these seven students continued to be classified as non-English speaking; one (5401) was reclassified as limited English speaking.

Table 4.14

Changes in Language Status between Entry into the Bilingual Program and at SI Assessment

Students	Spanish language proficiency classification		English language proficiency classification		Dominant language	
	Program entry	SI assessment	Program entry	SI assessment	Program entry	SI assessment
1503	LSS	n/a	NES	n/a	A	B
7202	LSS	n/a	NES	n/a	A	B
1511	LSS	NSS	NES	NES	A	B
6401	LSS	NSS	NES	NES	A	D
1210, 1508	LSS	LSS	NES	NES	A	A
3407, 4404	LSS	LSS	NES	NES	A	A
5401	NSS	FSS	NES	LES	B	B

Note. n/a = student was not reevaluated for language proficiency. NES = non-English speaking; LES = limited English speaking; NSS = non-Spanish speaking; LSS = limited Spanish speaking; FSS = fluent Spanish speaking. A = Spanish monolingual; B = Spanish dominant; D = English dominant. ID = identification number

Currency of language data. Seven students (50%) had been administered language proficiency tests within one year or less of their SI assessment: three students were reassessed for language proficiency within six months, after six months, and another four were tested between seven months and one year of the assessment. Five students (36%) had language proficiency tests administered more than one year before they were assessed in SI: one student's language proficiency tests were more than 18 months old, and three were over two years old. One student's English language proficiency scores were

obtained within four months of the SI assessment, but the Spanish language proficiency test scores were over two years old. Language proficiency data were missing for two students (14%).

Referral Information

Interventions prior to referral. Information about interventions attempted before referral was reported for only three students. Intervention for these three members of the SI → LD subgroup included peer tutoring and modified assignments.

Grade at referral. Table 4.15 presents grade at referral for SI. Half of students were referred in first ($n=7$), 22% ($n=3$) in fourth grade, followed by 14% ($n=2$) in third grade.

Table 4.15
*Grade at SI Referral of ELLs in the LD*SI Subgroups*

Grade	SI → LD	LD + SI	LD → SI
K	1	0	0
1	3	4	0
2	1	1	0
3	0	1	0
4	0	0	3

Note. K = kindergarten

Reasons for referral. Referral information was available for 12 of the 14 participants (86%). Nineteen reasons for referring students for speech/language assessments were given, averaging 1.6 reasons per student. The referral concerns included

expressive language ($f=9$; 47%), listening comprehension ($f=6$; 32%), and speech problems ($f=4$; 21%).

Three of the 12 students (25%) were referred for listening comprehension only and two (17%) were referred for expressive language only. Of the remaining students, four (33%) were referred for expressive language and articulation, and three (25%) for both expressive and listening comprehension problems.

Speech and Language Tests

The district used four assessment instruments to determine students' eligibility for bilingual speech therapy: the Expressive One Word Picture Vocabulary Test-Revised (EOWPVT-R; Gardner, 1990), the Language Screening Assessment Tool (LSAT; District, n.d.), the Spanish Articulation Measures (Mattes, 1987) and the Test of Problem Solving (TOPS; Zachman, Jorgenson, Huising, & Barrett, 1984).

Expressive One Word Picture Vocabulary Test-Revised. Appropriate for children between the ages of 2 and 11, the EOWPVT-R (Gardner, 1990), is an individually administered test designed to measure expressive vocabulary by presenting a stimulus picture and asking the child to name the item. Available in English and Spanish, the EOWPVT-R consists of 100 pictures organized in a series of increasingly complex vocabulary. The test was normed on a sample of 1,118 children in the San Francisco Bay area. No information was provided on the socioeconomic status or the racial/ethnic background of the standardization sample. Internal consistency reliability was reported as .90. The EOWPVT-R was compared with the vocabulary and similarities subtests of the Wechsler Intelligence Scales for Children-Revised (WISC-R; Wechsler, 1974) and various

subtests of the Wechsler Preschool and Primary Scale of Intelligence (Wechsler, 1980). These comparisons yielded moderate to low correlations, ranging from .19 to .59 (Salvia & Ysseldyke, 2003). No additional information on validity was provided. The Spanish version of the EOWPVT-R is a direct translation of the original test. It was neither normed nor standardized on Spanish-speaking students. Only English norms are available (Salvia & Ysseldyke, 2003).

Language Screening Assessment Tool. The Language Screening Assessment Tool (LSAT) instruments (District, n.d.) were locally developed and incorporated developmental scales from other instruments. The English LSAT scales were not normed; the Spanish version is a direct translation of the English version (Liu et al., 2008).

The Preschool Scales (Preschool-5 years, Primary, and Intermediate Scales) assess form, use and content (Liu, 2008). Form refers to the surface structures of language such as phonology, morphology, and syntax; use focuses on pragmatics (i.e., the social rules for interactions) and functions of language (e.g., organization, requesting information, engaging in conversation); and content relates to semantics, or meanings of words and symbols (e.g., answering simple/complex questions, and appropriate vocabulary usage; Leonard, 2000). Additionally, the Scales assess voice and rhythm. Assessment results are reported according to three levels of severity of speech and language disorders: mild, moderate, and severe.

Spanish Articulation Measures. The Spanish Articulation Measures (SAM; Mattes, 1987) is a criterion-referenced test designed to measure speech production and phonological processing skills of native Spanish-speaking children as young as three.

SAM is divided into four sections. The Spontaneous Word Production Task assesses production of consonants, clusters and phonological processing as the child labels pictures. The Word Repetition Articulation Screening assesses consonant production by having the child repeat words read by the examiner. The Sound Stimulability in Syllables subtest assesses how well students imitate production of consonants in syllables, and the Articulation in Conversational Speech component assesses pronunciation in spontaneous conversation.

Test of Problem Solving. The Test of Problem Solving (TOPS: Zachman, Jorgenson, Huising, & Barrett, 1984) evaluates language-based knowledge and reasoning abilities of students ages six through 11. Using photographs presented as a series covering a variety of topics such as health, learning, environment, friendship, community and family issues, the TOPS measures performance in students' ability to problem solve, determine solutions, draw inferences, predict outcomes, use context clues, empathize and verbal comprehension (Bernhardt, 1990). The test was normed on 1,296 students from across the country. Ethnicity was reported as representative of the school population based on the 1980 Census. Test-retest reliability was measured at .85 with a range of .66 to .95. The researcher was unable to locate a technical manual for the first version of the TOPS; descriptive and normative data were taken from a reliability study of the TOPS completed by Bernhardt in 1990. There is no Spanish version of this test.

Tests administered. All students were assessed with one of the Spanish LSAT (District, n.d.) instruments. Twelve (86%) were assessed in Spanish only and two (14%) were tested in English and Spanish.

Of the 12 assessed in Spanish, two (17%) were given the LSAT Preschool-5 years and six (50%) were assessed with the LSAT-Primary. The other four (33%) were assessed with the Spanish LSAT-Primary and other measures. Two of them were given the Spanish Articulation Measures; the EOWPVT-R in Spanish was administered to the other two students. One of the two assessed with the LSAT-Primary and EOWPVT-R was also administered the Spanish LSAT-Intermediate.

The two students who were evaluated in English and Spanish (5401, 6401) were assessed with the Spanish LSAT-Intermediate, the TOPS in Spanish, and the EOWPTV-R in English and Spanish. One of these two students was also given the LSAT-Intermediate and the TOPS in English.

Assessment Results

Test results. Scores on the Spanish LSAT-Preschool and Primary versions are based on the percentage of correct responses. Scores for the two students who were given the LSAT-Preschool were 62% and 85%, respectively.

The Spanish LSAT-Primary has 136 test items and the score is the number of correct responses. Test scores were provided for nine of the 10 students assessed with this instrument. In the case of the 10th, the examiner did not provide a score, noting that the test was a translated version of an English test. Students' scores on the Spanish LSAT-Primary ranged from 51.5 to 95 with a mean of 74. The percentage of correct responses ranged from 38 to 70. On average, the nine students who were assessed with the Spanish LSAT-Primary correctly responded to 54% of the test items. The LSAT-Intermediate reports the number of skills that need remediation; skills needing remediation for the three

students assessed with the Spanish version ranged from 8 to 19 out of a total of 35 skills. One of the three students was also assessed with the English LSAT-Intermediate and obtained a score of 22.

Four students assessed with the Spanish EOWPVT-R had standard scores of 71 to 73, which fall within the delayed range. Two of these three students had standard scores less than 55 on the EOWPVT-R and standard scores of 41 and 40 on the TOPS in Spanish. One of the two students was also assessed with the English TOPS and obtained a standard score of less than 55. Standard scores less than 55 on the TOPS are in the very delayed range. The scores for both the TOPS and the EOWPVT-R were obtained from English norming samples.

Severity levels. LSAT scores were used to classify students according to the severity of the disorder, mild, moderate, or severe by area of speech and language. Table 4.16 summarizes the type and severity of speech and language disorders reported. All participants were diagnosed with moderate expressive and receptive language delays. Four participants were also diagnosed as having articulation disorders, three of which were considered to be moderate disorders, and one a severe disability. One student also had a mild to moderate rhythm disorder and another had a severe voice disorder.

Table 4.16
Initial Speech Impairments by Type and Severity of Disorder

Type of Disorder	Level of Severity		
	Mild-moderate	Moderate	Severe
	<i>n</i>	<i>n</i>	<i>n</i>
Language			
Expressive	0	14	0
Receptive	0	14	0
Articulation	0	3	1
Rhythm	1	0	0
Voice	0	0	1

Note. Some students met criteria in more than one SI disability area.

Eligibility Determinations

District MDTs determined that every participant met legal criteria for special education services as a student with SI. Nine of the students (64%) were classified as having language disorders only, three (22%) had language and articulation disorders, and one (7%) had disorders related to language, articulation, and voice. The remaining student (7%) was diagnosed as having a language disorder and a mild to moderate rhythm disorder.

Services After Initial SI Eligibility Determination

According to the MDT report, speech and language services in Spanish were provided to 13 students. Eleven of the 13 students received 60 minutes of direct speech and language therapy and one received 15 minutes of direct therapy per week. MDTs recommended that the remaining student receive 60 minutes of direct speech and language therapy per week unless it was not available, in which case, the student was to receive 15

minutes per month of Spanish speech and language services on a “consulting basis.” One student was to be provided 60 minutes of speech and language therapy in English, with Spanish support, if necessary.

Three of five students in the SI → LD subgroup were also provided reading, language arts and math instruction in a BSE classroom for three hours a day even though they had not yet been identified as LD. Two of these three were provided an additional 1 hour, 30 minutes of re-teaching in the BSE classroom, for a total of 4 hours, 30 minutes of special education support per day. The BSE instructional time decreased to three hours per day when the two students who were receiving re-teaching support were identified as having LD. Students in the LD → SI and the LD + SI did not receive BSE services before initial LD eligibility determination.

Clinical Judgment Panel Findings

Members of the clinical judgment panel (see page 11 for a description of the panel) independently reviewed all available student data and made an independent decision as to whether each student in the LD*SI group qualified as having a reading-related LD. They then met to compare their independent eligibility recommendations. The clinical judgment panel's recommendations were unanimous for nine students (64%). In the other five cases (36%), the experts reached a consensus decision about eligibility.

Members of the clinical judgment panel concluded that when factors other than an IQ-achievement discrepancy were considered, all but one student could be classified as having disabilities. Students with disabilities included two groups: four students (31%) with a reading-related LD (Group 1A) and nine students (69%) whom the panelists

believed had disabilities other than LD (Group 1B). The one student the panelists did not include in either of the disability groups had difficulties that the panel felt could be explained by environmental factors, and/or that additional data were needed to determine special education eligibility.

Characteristics of Students with Disabilities

Students with reading-related LD. Three of the four ELLs the panel qualified as having reading-related LD were in the LD + SI subgroup (1210, 1511, 8305) and the fourth was in the LD → SI subgroup (1508). These students had several characteristics in common.

First, students' FIEs showed that the four students had large IQ-achievement discrepancies, ranging from 28 to 45 points in the areas of basic reading and/or reading comprehension. These discrepancies were over three standard deviations (45 points) for one, over two standard deviations (36 points) for another and a nearly two-standard deviation for the fourth (28 points).

Second, multiple sources confirmed that students had experienced academic difficulties over time. Three of four students in this subgroup had been socially promoted or "placed" in the next grade level. Parents corroborated the teachers' concerns about academic difficulties for three students; in two cases, teachers in the previous grade had noted students were experiencing difficulty in their classes.

Third, all four students continued to display reading-related difficulties despite documented pre-referral interventions. Examples of interventions included Reading

Recovery, adaptation of textbooks, individual and small group tutoring, reduced assignments, assistance with fine motor difficulties and instructional support at home.

Fourth, each student demonstrated two or more characteristics often associated with LD (e.g., forgets easily, short-attention span, poor fine motor skills, disorganized, difficulty staying on task). The most frequent of these was forgets easily ($n=4$), followed by poor fine motor skills ($n=3$) and difficulty remaining on task ($n=3$).

Fifth, there was sufficient evidence in students' school records to rule out competing factors or hypotheses that might explain learning problems. For example, students had no health or physical concerns at the time of referral. All had stable school histories and no attendance issues that might have affected performance were noted.

In two cases, results from the speech and language evaluation corroborated both teacher and parent concerns. These two had demonstrated poor memory and listening comprehension skills; the mother of one of these two indicated that her son frequently became frustrated because of his inability to verbally convey his needs (8305). The speech and language therapist indicated that this boy was unable to follow two-step directions and could not discriminate between who, what and where questions. In the third case, the teacher's special education referral was due to the mother's inability to understand her son and her fear that he may not be able to retain information. The speech and language pathologist diagnosed this child with articulation and fluency disorders, and language delays. The teacher and the special education examiner of the fourth child (1508) were concerned about this student's receptive and expressive language skills. The teacher noted that this child had difficulty understanding directions in the classroom. The student was

unable to answer questions about herself or her family; though she knew her age, she did not know her date of birth, how many siblings she had, nor what grade she was in.

Students with disabilities for whom the clinical judgment panel questioned an LD classification. The panelists agreed with district MDTs that the nine students in Group 1B most likely had disabilities other than LD. In each case, characteristics symptomatic of other disabilities were noted (e.g., speech delays, ADHD, possible head trauma, behavior issues). Because there was substantial variation among the students in Group 1B, their cases are briefly described below.

3407. The clinical judgment panel felt that enough information was present to support an SI classification for this student. The teacher cited articulation problems as the primary reason for referring the child to special education and the mother corroborated the teacher's concerns. Results of the SI evaluation validated the referral.

The teacher reported that the student suffered from headaches and nosebleeds and attributed these symptoms to anxiety, particularly at school (e.g., “when he does not succeed”), but there was no documentation that the child had received medical attention for these problems. Furthermore, the teacher's reports of pre-referral interventions suggested that the modifications (i.e., more response time, modeling, providing cues) were not specific to reading problems. The panel concluded that this student likely qualified for special education, but that given the need for additional medical data and inadequate pre-referral interventions, data were insufficient to qualify the student as LD.

4404. This student's language development history was significant in that he did not speak his first words until he was almost four years old. Both mother and teacher

corroborated the student had trouble with verbal expression and retention of information. Results from the SI evaluation were consistent with teacher and parent concerns. The speech and language pathologist noted that the student's speech was 50% to 75% unintelligible, and that he had significant problems in controlling both the pitch and loudness of his voice. Both the parent and the teacher agreed the child had academic concerns, but the panelists questioned the LD classification because of the speech/language problems, and because the mother also noted that the child had been exposed to domestic violence. The child was described as withdrawn, lacking in self-confidence and having a negative self-concept; yet, no counseling interventions had been provided. Neither assessment personnel nor MDTs appeared to have considered the possible impact of domestic violence on student performance. The panelists felt that additional information was needed to rule out post-traumatic stress as a primary cause of the student's underachievement.

1503. The panel members questioned whether missing a substantial part of second grade might have contributed to this student's academic problems. The only information provided about the child's withdrawal was that she had gone to Mexico for 12 weeks. There was no documentation of academic problems in the student's file prior to her withdrawal from school. Nor was there documentation of efforts to make up for instruction she had missed after she returned to school. While both parents and teachers noted academic concerns, panelists could not rule out lack of educational opportunity as a primary contributing factor for the student's academic problems. The child was placed in the third grade and was referred for assessment a few months later. The clinical judgment

panel concluded that there were enough data in the report to substantiate a diagnosis of SI because there were significant receptive and expressive language problems noted in the speech and language evaluation, which were consistent with teacher concerns.

9407. The panelists noted that this student, previously identified as having SI, received no pre-referral general education interventions prior to LD assessment, and even though the student was still receiving Spanish language support as needed, only her English achievement had been assessed. Since the student had recently been transitioned to English instruction, it would have been important to determine whether reading disabilities were manifested in Spanish. Furthermore, this student had a behavior implementation plan (BIP) which targeted the same goals year after year, suggesting that behavior problems might be the reason for her underachievement. Data in student's records suggested the child qualified as SI. Results from the speech evaluation reported that she had difficulties understanding and giving directions; these findings were consistent with parent and teacher concerns.

3505. This child demonstrated a discrepancy of 50 points between IQ and reading comprehension. The panelists questioned an LD classification because (a) the child had been receiving BSE instruction in reading prior to LD testing and thus may have been denied access to instruction in the general education reading curriculum and, (b) information about general education interventions was lacking. Although the child had missed 24 days of school in second grade, he was described as progressing when instructional materials were at his level. The assessor did not address the impact of the child's speech disability on reading performance. The child's speech was described as

difficult to understand by both his mother and his teacher. He had difficulty understanding directions and with verbal expression. How his speech and language skills may have influenced reading acquisition was not addressed.

4206. The panelists felt there was sufficient documentation to support the SI diagnosis for this student. The speech and language pathologist had modified the assessment process to accommodate the child's distractibility (e.g., established eye contact before giving directions, gave more response time to answer each question), but results still indicated significant problems related to speech intelligibility, conceptual development, and problem solving. A physician diagnosed this student with asthma. Because the student's teacher suspected the child had ADHD, a form was sent to the doctor requesting an evaluation, but it was not returned. Descriptions of the boy's behavior provided by the mother and by the teacher were contradictory, parents described him as calm at home, but the teacher described him as hyperactive at school. Panelists hypothesized that the asthma medication the child was taking might be influencing his behavior. Moreover, the assessor noted that the child had frequently been absent from school the year before, and that lack of educational opportunity should be considered as a contributing factor before identifying him as LD. The assessor also noted that the student's attendance had improved, but that medical and behavioral concerns had not been addressed. The panel concluded that there were too many competing hypotheses about the cause of the student's problems to classify him as LD

5401. This student was identified by district MDTs as having LD and Other Health Impairments (OHI). The panelists believed his behaviors, which were typical of ADHD,

might well explain his academic difficulties. The child had a long history of behavioral issues and he had received some academic interventions, although teacher and parent descriptions centered more on behavioral rather than academic concerns. The mother's major concern was that her son must remain calm in the classroom. The teacher noted that the classroom setting provided too many distractions, making it difficult to manage the student's behavior. Achievement problems might be explained by the child's distractibility and hyperactivity. The panelists questioned whether behavioral contracts and rewards were sufficient to address behaviors stemming from ADHD. IQ reading achievement discrepancies were barely significant. Moreover, potential explanations for reading difficulties were not adequately addressed. For example, attendance was not documented; the child usually fell asleep in class, but there was no explanation as to why she might be experiencing fatigue. The panelists concluded that the available data suggested the possibility of ADHD, but were insufficient for a diagnosis of reading-related LD.

7202. Panelists felt that available data suggested the possibility that this student had ADHD. Both the parent and the teacher had observed that the child was frequently distracted and could only concentrate for short periods of time. The student worked better alone, but needed frequent reminders to stay on task. There was no documentation in this student's file indicating that behavioral interventions had been attempted. Although she met the IQ-reading discrepancy criterion based on the broad reading cluster score (18 points), she did not meet the criterion on the two tests that make up this cluster, the letter-word identification subtest, which showed an IQ-achievement discrepancy of 15 points, or

the passage comprehension subtest, which indicated a 15-point discrepancy. The panelists indicated that behavioral interventions should have been provided, results documented, and an ADHD screening conducted before classifying the student as LD.

3503. The ninth student had significant medical and/or behavioral problems. He was hospitalized for two months shortly after birth and had fallen out of a moving car on two separate occasions. By second grade, this participant had tried to run away from home several times. Troublesome behaviors were observed at home and at school by his parents and his teachers. The teacher reported the student demonstrated poor impulse control, mood swings, anxiety, anger, defiance and aggression. His mother indicated that he demonstrated aggression towards siblings and strangers, and she reported instances of stealing and lying. There was no documentation that the child had received medical evaluations, or that behavioral interventions had been provided. The clinical judgment panel concurred that medical and emotional issues had not been adequately addressed. They suggested that until a medical examination and assessment for emotional/behavioral disturbance had been completed, classification as LD was inappropriate.

In summary, panelists questioned the reading-related LD classification for these nine children for a variety of reasons. These included: (a) behavioral and/or emotional issues were not adequately addressed; (b) significant life events (e.g., history of domestic violence) were not adequately addressed; (c) pre-referral interventions were not adequate prior to placement in a BSE classroom; (d) medical issues were not resolved; (e) attendance issues were not sufficiently addressed; (f) academic problems could be explained by absences from school; (g) IQ-reading discrepancies were barely significant;

(h) parent concerns did not corroborate teachers' reasons for referral: and, (i) the language of testing did not match the language of instruction. They were also concerned that the impact of a speech disability, possible medical issues, and the impact of behavior (i.e., distractibility and attention span) on reading performance were not addressed.

Characteristics of the Student the Panel Did Not Qualify for Special Education

6401. The panelists felt that insufficient evidence and too many competing hypotheses were present to make an eligibility recommendation for this student. First, although there were medical indicators, evidence suggested that health-related problems had been resolved. The student had suffered a head injury in first grade, but was examined by a physician, and given medical clearance. The mother also reported that the student had experienced emotional trauma as a young toddler but had received family therapy for almost two years. She was promoted to kindergarten, first, and second grades, but socially promoted to third. Some of the information contained in school records was contradictory. For example, the girl's mother and teacher were concerned that the child could not read in Spanish, but at end of first grade a meeting was held to determine whether the child would be promoted, and the report indicated that she could both read and write in Spanish. The panelists concluded that sufficient evidence was not available to justify a disability classification in this case. Information in the student's cumulative files indicated that the lack of early intervention efforts and poor attendance might explain the student's poor academic progress.

Summary

The LD*SI students enrolled in the bilingual education program in pre-kindergarten or kindergarten. As expected, Spanish was their dominant language; all were classified as non-English speakers on the IPT I at initial enrollment in bilingual education. At the time participants were initially classified as LD and SI, results from language proficiency tests and/or language dominance classifications indicated that 13 of the 14 students had made little to no improvement in their Spanish and/or English oral language skills. The majority (75%) had been socially promoted to the next grade at least once; one had also been retained.

The most frequent reasons for referral were language/literacy issues, general academic problems, and behavioral issues. Teachers of five of the 14 students indicated they had requested problem-solving meetings, but little information was provided about the results of these meetings. The pre-referral interventions students most often received were alteration of assignments and grading adaptations.

Twelve of 14 students were tested solely in Spanish for LD determination. One was tested in English and Spanish, and one was tested in English only. Thirteen of the 14 students were assessed with nonverbal IQ tests. Significant discrepancies between IQ and reading achievement were documented and the majority of students qualified in both basic reading and reading comprehension. All 14 received reading-related BSE instruction and 10 of the 14 also received BSE classroom instruction in writing and math. The average time students spent in a BSE classroom was 2 hours and 45 minutes per day.

Students with SI were most frequently referred for expressive language and speech concerns, followed by problems in listening comprehension, and difficulties in both expressive language and listening comprehension. All 14 students were identified with moderate expressive and receptive language delays and MDTs recommended 60 minutes of bilingual speech therapy per week for the majority.

Overall, the clinical judgment panel concurred that 13 of the 14 students qualified for special education services. The panelists concurred that four ELLs qualified as having reading-related LD. All had significant IQ-achievement discrepancies, they had received pre-referral interventions, and multiple sources confirmed students' reading difficulties over time. Moreover, each student exhibited characteristics often associated with LD.

Panelists agreed that nine of the 13 students likely had disabilities other than LD. Although there was considerable heterogeneity among this group, panelists felt that sufficient data were available to support an SI diagnosis for six students, and that the other three students should be assessed for ADHD and/or emotional disturbance.

Finally, panelists believed there were too many competing factors to qualify one for special education, and indicated that significant life events, attendance issues and lack of pre-referral interventions might explain the student's academic problems. Information related to these factors was needed to address the exclusionary clause as required by federal law before classifying a student as LD.

The implications of these results are discussed in the next chapter.

CHAPTER FIVE

Discussion

A subset of data from the Field Initiated Study (FIS), Bilingual Exceptional Students: Effective Practices for Oral Language and Reading Instruction was analyzed to describe the characteristics of 14 Spanish-speaking English Language Learners (ELLs) identified as having reading-related LD. Students in the sample were also classified as having speech and language impairments (SI) before, at the same time as, or after being classified as LD; these students are referred to as the LD*SI sample. The participating district was chosen because it offered bilingual education and bilingual special education programs. Moreover, students referred to special education were assessed by bilingual school psychologists, bilingual educational diagnosticians, and/or by bilingual speech and language pathologists. Researchers expected that this configuration of general and special education services would increase the likelihood that ELLs would be appropriately identified as having learning disabilities.

The research study was guided by these questions:

1. What were the characteristics of elementary-age, Spanish-speaking ELLs when they were initially identified as having reading-related learning disabilities by the participating district's multidisciplinary teams (MDTs)?
 - a. What were their demographic characteristics?
 - b. Why were they referred?
 - c. How were they assessed?

- d. What were their assessment results?
 - e. What was the nature of students' reading-related LD as determined by MDTs?
- 2. How did the clinical judgments of an expert panel regarding students' eligibility as having reading-related LD compare with the eligibility determinations of the participating district's MDTs?
- 3. What were the speech and language characteristics of the elementary-age Spanish-speaking ELLs when they were initially identified as SI by the participating district's MDTs?
 - a. What were their demographic characteristics?
 - b. Why were they referred?
 - c. How were they assessed?
 - d. What were the assessment results?
 - e. What was the nature of each student's speech and/or language impairment(s) as determined by district MDTs?

Descriptive statistics were used to summarize students' demographic characteristics, school history, reasons for referral, assessments used by the district, assessment results and nature of the SI and the reading-related LD as determined by district MDTs. A clinical judgment panel reviewed all available student data and made an eligibility recommendation for each student. The panel's recommendations were then compared with those of the district's MDTs. The findings presented in Chapter 4 are discussed here.

Participant Characteristics

A description of the participants was presented in Chapter 3. Data analyses revealed additional information about these ELLs and their parents, information that reinforces the importance of not stereotyping culturally and linguistically diverse (CLD) learners and their families.

Families

Hispanics are typically described as living in large, extended families (U.S. Census, 2000), but this was not the case for the participants in this study. The majority of students were from nuclear families, consisting of both parents and one to three siblings. Moreover, while approximately forty percent of the students in the sample were immigrants, contrary to the literature (Anderson, 1992), they were not highly mobile. Of 13 students for whom data were available, 11 had been in the same school since initial enrollment.

About two-thirds of the students' parents had less than a high school education, a factor often associated with limited participation in school activities and events (Kalyanpur & Harry, 1999). In this case, though, the parents of 10 of the 14 participants attended the MDT meetings held to determine whether their children were eligible for special education services. The other four students had already been admitted to special education under an SI classification, and three of the four were already receiving bilingual special education (BSE) services even though they had not been tested for LD. Special education records did not shed light on why the parents of these four children were not present at MDTs.

However, it is not unusual for parents to attend initial, but not subsequent, special education meetings (Kalyanpur & Harry, 1999). The reasons for this should be explored to identify ways to maintain parent participation over time.

Progress across Grades

Seventy-five percent of the participants had been socially promoted to the next grade at least once; one of the participants was also retained once. This is contrary to the literature, which has found that retention is preferred over social promotion (NASP, 2003). All were ultimately referred to special education, suggesting that neither social promotion nor retention were successful strategies for improving student achievement. Students who are socially promoted or retained have typically been experiencing problems long after they were first observed. These problems are more likely to be prevented if instructional interventions are provided as soon as learning problems are observed (Garcia & Ortiz, 2006). Providing interventions when a problem first becomes apparent may keep it from progressing to a point where special education services must be considered.

Language Dominance and Proficiency Assessment

School districts are mandated to annually assess the English oral language proficiency of ELLs to determine whether they are eligible for special language programs [19 TAC §89.1205 (d)]. The findings of this study revealed several concerns associated with the implementation of this policy.

Bilingual education records indicated that only half of the LD*SI sample had current language proficiency tests at the time of their initial LD or SI assessments. Yet, current language data are required to establish a student's language dominance and

proficiency. Referral and multidisciplinary teams consider these data as they try to determine whether limited English proficiency is contributing to a student's underachievement (Ochoa & Ortiz, 2005; Ortiz, 1997). If students are referred for a comprehensive evaluation, IDEA (1997) requires that they be tested in their dominant language, unless it is not feasible to do so. Because language skills of ELLs may change quickly, it is recommended that language assessment scores for younger children be no more than six months old (Ortiz, 1997). This suggests that referral committees should assure that updated language proficiency data are available before a Full and Individual Evaluation (FIE) is initiated (Alvarado, 2002).

Language proficiency data considered in making bilingual education eligibility determinations for study participants were contradictory at times. For example, language assessment scores placed five students in the non-English speaking category. However, the bilingual education committee decided that four of the students were Spanish dominant, but spoke some English, and that the fifth was English dominant, but spoke some Spanish. The committee did not document its rationale for assigning students to a language classification that was not indicated by the language assessment. Because the language dominance classification is used to determine the student's program placement and informs decisions about native language and ESL instruction, bilingual education committees should ensure that language proficiency tests are up-to-date and that language classifications are consistent with test results.

Special Education Procedures

There were serious shortcomings in the participating district's implementation of special education referral, assessment, eligibility determinations and placement procedures for ELLs.

Early Intervention

Early intervention is recommended as a way to reduce the inappropriate referrals of ELLs to special education (Garcia & Ortiz, 1988; Ortiz & Yates, 2002). Nonetheless, all participants in this study were provided speech and language therapy without documentation that general education teachers had attempted interventions specific to the communication behaviors that concerned them. Such interventions were critical because results of language proficiency assessments indicated that students were not acquiring English proficiency as expected and that their Spanish language skills were also not improving. Evidence that students continued to experience language problems despite differentiated instruction and increasingly intensive interventions in the bilingual education classroom would support a speech and language referral.

In a similar vein, students were often referred to special education because of suspected learning disabilities, but with limited documentation of interventions attempted, or the effectiveness of the interventions in resolving academic difficulties. Rather than requesting an FIE, referral committees should ask problem-solving teams to develop and implement interventions to address teachers' concerns and to document progress as a result of student interventions. Moreover, referral committees themselves should design such

interventions as a prerequisite to special education testing. Documentation of how students respond to interventions is fundamental to excluding lack of opportunity to learn as a cause of communication and achievement problems (Ortiz, 1997; Ortiz, 2002).

Problem solving teams. The participating district required teachers to request assistance from campus problem-solving teams before referring students to special education. As indicated previously, problem-solving teams work with teachers to develop and evaluate interventions and to monitor progress toward resolving academic and behavioral issues (Truscott, Cohen, Sams, Sanborn & Frank, 2005). Only five of the participants' teachers requested help from problem-solving teams the year these students were referred to special education. Teams recommended referral to special education for one student and, in the case of another, recommended that the teacher “work more with the student.” If recommendations such as these are typical, bilingual education teachers will see no value to participating in the team process. Robertson, Wilkinson, and Ortiz (2008) found this to be the case. Bilingual educators reported that problem-solving teams did not adequately address linguistic and cultural diversity, and did not help them design or monitor interventions prior to referral to remedial or special education programs. As a result, teachers did not routinely request assistance from these teams. This might explain why the teachers of the other nine students in this study did not take advantage of this resource.

Referral Practices

Reasons for referral. Consistent with previous research, teachers' reasons for referral were often vague or unclear (Liu, 2006; Rodriguez & Carrasquillo, 1997;

Wilkinson et al, 2006). For example, students were referred for academic concerns, often without descriptions of specific issues or identification of the content/subject areas where problems were occurring.

Lack of documentation of presenting problems. Referral committees function as gatekeepers in that they can prevent children from being removed from the general education classroom, unless their needs cannot be met in that context (Ortiz et al., 2006). If they receive referrals with insufficient documentation of student difficulties, the committee's first response should be to work with teachers to generate data to guide the design of interventions and/or determine whether students should be referred to alternative instructional support programs or to special education.

It was apparent from student records that referral committees focused attention on information provided by the teacher making the referral. While this information was important, student records indicated that many of the students had been experiencing difficulties for quite some time. The high number of social promotions and retentions were clear evidence of this. Referral committees should have determined whether, and how, students' problems had been addressed in earlier grades; if there was no record of interventions attempted or of the results of these interventions, it is quite possible that presenting problems could be attributed to lack of timely interventions (Wilkinson et al., 2006).

Special Education Assessments

Language of assessment. The participants in this study had been enrolled in the district's bilingual education program from one to five years (average of 2.8 years).

Although they were receiving, or had received, native language and ESL instruction, only two students were tested in both languages. Because achievement is the product of instruction (Ochoa & Ortiz, 2005), students in bilingual education programs should be assessed in both languages (Ortiz & Yates, 2002). Testing in Spanish alone shows what the student has learned as a result of native language instruction, but provides no insight as to skills acquired as a result of ESL instruction. Similarly, testing only in English denies students credit for what they have learned as a result of instruction in Spanish. For example, one student was assessed for SI in English only, even though he was a fourth grader who had just recently been transitioned to English instruction. In this instance, a dual language assessment would have provided better data upon which to base an eligibility determination.

That students were not tested in both languages raises several questions and concerns. In determining the language of assessment, the nature and extent of native language and English instruction students have received over the course of their schooling should be considered. If instruction has been provided exclusively in Spanish, as is sometimes the case for younger students and for struggling learners, then testing primarily in Spanish might be appropriate. Even in such instances, though, assessors should attempt testing in English, discontinuing the administration if it is clear that students are unable to respond to tasks. All testing attempts should be documented on the FIE.

Assessment personnel should clearly establish whether students demonstrate significant communication or reading difficulties in Spanish, in English, or in both languages (Ortiz & Yates, 2002). If a student does not demonstrate reading-related LD in

Spanish, then qualifying him or her on the basis of English test results alone would be inappropriate. Likewise, communication disorders should be documented in the students' dominant language.

Instruments and Procedures. All participants were diagnosed with moderate receptive and expressive language disorders based on the results of the Language Screening Assessment Tool (LSAT, District, n.d.). This instrument was initially developed by the district's speech and language pathologists to assess English speakers and was then translated into Spanish. Neither the English versions nor the Spanish translations of the LSAT were normed, raising serious questions about the validity of test results.

The literature cautions against the use of translated tests. While translation may render the language understandable to students, the content of the assessments may still not be culturally or linguistically relevant. Moreover, the difficulty level of items may change as a result of the translation (Bedore & Pena, 2008; Figueroa, 2002; Sattler, 2001). Translated instruments are thus not appropriate for making eligibility determinations (Abedi, 2001; Alvarado, 2005; Liu 2006; Liu et al., 2008; Ochoa & Ortiz, 2005; Ortiz & Yates, 2002; Sattler, 2001; Valdez & Figueroa, 1994; Wilkinson et al, 2006).

Given the inherent problems with the use of standardized tests with ELLs (e.g., inappropriate norming sample, lack of linguistic realism, lack of authenticity), results from standardized achievement tests should be corroborated by informal measures (Bedore & Pena, 2008; Garcia, 1994; Ortiz & Yates, 2002; Rodriguez & Carrasquillo, 1997). There was no evidence that assessors used informal assessments (e.g., language samples,

portfolios, informal reading inventories) to corroborate results of formal measures used with the ELLs in this study.

Relationship between referral concerns and assessment results. Academic areas in which students met LD eligibility based on FIE results did not always correspond with the reasons teachers referred students to special education. For example, one student was referred for behavior problems only, and another student was referred for behavior and reading problems. In both cases, the assessor noted the teachers' concerns about, but did not assess, the students' behavior. Assessment results indicated that the students met the criteria for LD eligibility, but the question of how behavior might have impacted these results was left unanswered.

Evaluation results showed that two other students met eligibility criteria in academic areas that teachers had not identified as problems. Assessment personnel should have validated test results. This would include, for example, confirming whether parents and/or teachers were aware of, or concerned about, the issues identified in the formal assessment and/or whether interventions had been attempted in these areas. Parents and teachers might provide information to show that test results could be explained by factors other than the presence of a learning disability. If such were the case, classifying the student as LD would be inappropriate.

Family Input. As suggested above, families can provide important information about children's language and home literacy experiences and valuable insights as to why their children may be experiencing problems at school. For example, a parent's report that

their child experienced delays in native language development can validate a request for a comprehensive assessment of language skills (Langdon, 2008; Ortiz & Yates, 2002).

Parents and teachers did not always agree on the nature of students' difficulties. For example, two students were referred for speech and language assessments, but parents of one child were primarily concerned about his classroom behavior and parents of the other about her academic difficulties. In such instances, parents' concerns should be explored because there may be reason to address them as part of general education intervention or in the FIE. If results show that problems are not disability-related, educators can still support parents by recommending ways to deal with the behaviors that concern them. Parents are also more likely to give consent for special education services if they feel that educators have responded to their concerns. They will be more likely to support IEP goals and objectives if they understand the rationale for these services.

Eligibility Determinations

Because SI assessments relied on a translated instrument, it is impossible to determine whether the participants in this study had speech and language impairments. Given that, discussions of eligibility determinations will focus on their classification as LD.

An IQ-achievement discrepancy was the primary criterion used by MDTs to determine eligibility for special education services under the category of LD. All 14 participants met the criterion of a 16-point or greater discrepancy between IQ and achievement as required by Texas policy (TEA, 2000). The ease of making eligibility determinations using a simple discrepancy formula has contributed to its overuse and

misuse by assessment personnel and MDTs (Kavale & Forness, 2003). However, neither the absence, nor the presence, of an IQ-achievement discrepancy is a reliable or valid indicator of LD (Kavale & Forness, 2003, Mather & Gregg, 2006). That all students in this study met the IQ-achievement criterion, but that the clinical judgment panel qualified only four of 14 of them as having reading-related LD, substantiates this concern.

Prior interventions. Whether students received effective and timely pre-referral intervention is a major consideration in determining the presence of LD (Ortiz, 1997; 2002). Yet, there was little evidence that MDTs adequately considered the effectiveness of interventions attempted by teachers and problem-solving teams or the results of these interventions. One of the forms completed by MDTs included a section titled *alternatives considered/provided*, listing 16 possible interventions, (e.g., regular education modifications, Title I, accelerated instruction, tutoring, resource classroom). The most frequent "interventions" documented by MDTs as being provided were bilingual education and general education. That these are program placements, not interventions per se, reinforces other data indicating that interventions were limited or inadequate to address academic and/or behavioral issues for ELLs. Why MDTs dismissed lack of effective early intervention as a reason for students' problems is not evident.

Exclusionary clause. MDTs did not adequately consider evidence indicating that students' problems could be explained by physical/medical issues (e.g., head trauma, ADHD), prolonged school absences, interventions that were of insufficient intensity or duration, or that did not match presenting problems, and academic assessments that were administered in only one language, even though students were receiving, or had received,

dual language instruction. MDTs also did not seem to consider the possibility that students had disabilities other than LD or, in the cases of students already classified as SI, how speech and language impairments might have affected performance on the tests used to qualify students as LD. Thus, the teams did not comply with the exclusionary clause that stipulates that LD classification may not be the primary result of factors such as the presence of other disabilities, environmental, cultural or economic disadvantage (34 C.F.R. § 300.7 (c)(10)ii).

Special Education Placements

Federal legislation stipulates that special education students are to be educated with children who are not disabled to the maximum extent possible [IDEIA 2004, 20 U.S.C. §1312(5)(b)]. According to the Schedule of Services form located in the MDT meeting report, participants spent more than one-third of their school day (37%) in bilingual special education classrooms (i.e., an average of 2 hours, 45 minutes per day). Participants typically received instruction for reading, writing, and math in BSE classrooms, even when they did not qualify in all three areas. Placing students in special education for instruction in content areas for which they do not qualify violates a fundamental provision of IDEA (1997; 2004): that students are to be served in the least restrictive environment.

Three students were placed in bilingual special education classrooms even though they were classified as SI and had not yet been referred for an assessment and identified as LD. These children had no access to general education instruction, so it was impossible to know whether they would have been successful in that setting and, if not, whether general education interventions would have remediated their academic problems and prevented a

referral to special education. Surprisingly, there was no evidence that MDTs evaluated the effects of the special education services provided these students. Equally surprising was that referral committees, MDTs, and special education teachers did not advocate for an FIE for these students to validate the presence of reading disabilities and to pinpoint the specific nature of students' problems; such information is fundamental to the design of IEPs.

Implications for Practice

Examination of the LD-related findings of this and the other two FIS studies (Liu, 2006; Liu, et al., 2008; Wilkinson, et al., 2006) revealed many similarities. Reasons for referral for most of the students included academic difficulties, but the reasons for referral were described in general terms. If students were already being served as SI, the reason given for the LD referral was to establish eligibility for special education, not delineation of specific academic concerns that would warrant a comprehensive evaluation.

Forty-three of 44 students were assessed in Spanish, two were also tested in English. One of the participants in the present Langdon, 2008 study was tested in English only. LD eligibility determinations made by MDTs were driven by IQ-achievement discrepancies in all cases. However, across the three studies, clinical judgment panels concluded that only 10 of 44 students (22.7%) qualified as LD. Three-fourths of the participants (i.e., 34 of 44) did not qualify as LD. Of these, the panelists concluded that the evidence suggested the presence of a disability other than LD for 18 students (40.9%), and that difficulties could be explained by factors other than a disability, or that data were insufficient to make an eligibility determination in 16 cases (36.4%).

These findings, in aggregate, underscore the importance of improving policies and practices that govern identification of students as LD, with particular attention given to the complex factors that come into play when students are also limited English proficient. These factors include student language proficiency across languages, school histories, including the nature and quality of native language and ESL instruction, and the lack of appropriate instruments for assessing and qualifying students as LD. The findings also suggest that the participants involved in the special education process, from bilingual education teachers to MDT members, need professional development to help them distinguish students who are struggling due to inadequate attention to linguistic, cultural, and environmental factors that influence their communication skills and academic achievement from those who are struggling because they have learning disabilities.

Comprehensive Record Keeping Systems

A system of screening and assessment to pinpoint problems, targeted interventions, and continuous progress monitoring would provide better data upon which to base LD eligibility determinations for ELLs (Klinger & Harry, 2006). To that end, school districts need ways to aggregate data from multiple sources (e.g., bilingual education and special education records) so that information is readily available to teachers, intervention teams, and referral and MDT committees. Developing a system for collecting and storing student data over time should be a priority, given that findings revealed that student records were often located in various places, and that data were sometimes missing and/or incomplete (Wilkinson, et al., 2006). A comprehensive data collection system would enable teachers and other school professionals to access historical records to guide instructional planning,

referrals, assessments, and eligibility determinations. These data are also crucial for bilingual education placement committees so they can make informed eligibility determinations, recommend instructional interventions, and coordinate with MDTs regarding decisions and services for ELLs. Most importantly, perhaps, such a data system would allow teachers, intervention assistance teams, assessors, and bilingual education and special education committees to examine students' schooling trajectory retrospectively. Results of this study indicate that a longitudinal analysis of student performance between school entry and the point of referral to intervention assistance teams and referrals committees is crucial in distinguishing students with LD from those whose problems may be attributed to other factors. Tracking students' school histories longitudinally may help identify when students first began experiencing difficulties and may shed light on whether, or which, interventions were provided to help resolve student difficulties (Wilkinson, et al., 2006). With such data, problem-solving teams and referral committees are in a better position to generate hypotheses about causes of student difficulties. This would increase the number of appropriate referrals to special education and decrease inappropriate requests for full and individual evaluations.

Collaboration between Bilingual Education and Special Education

The findings of this study suggest potential areas of collaboration between bilingual education teachers and special education. Educational diagnosticians and school psychologists can share their assessment expertise with teachers so teachers can do a better job of assessing communication and academic problems and of documenting the effectiveness of their interventions. An important finding was that students remained

limited in their Spanish and English proficiency over the course of their schooling. Speech pathologists can help bilingual education teachers design interventions to enhance students' native language skills and to advance their English proficiency. With the guidance of assessment personnel, bilingual education teachers can support language and literacy-related IEP goals and objectives throughout the school day for students who continue to struggle.

Professional Development

Many of the issues identified in this study could be addressed by comprehensive, targeted professional development for all professionals who work with ELLs. Training should address basic concepts about native language and second language acquisition, language assessment, effective instruction, and differentiation and early intervention for struggling learners (Ortiz, 2002).

The responsibilities of bilingual education teachers, bilingual education placement committees, assessment personnel, problem-solving teams, referral committees, and MDTs should be delineated. The supports needed by each to effectively carry out their responsibilities should be identified. For example, members of the language proficiency assessment committee and school psychologists/educational diagnosticians should be trained to assess conversational and academic language proficiency assessments and understand how proficiency levels may impact student achievement. They should be sensitive to language acquisition and academic progress over time and target for intervention those students who do not appear to be making expected progress in Spanish and/or English language development.

Teachers need professional development focused on gathering and interpreting data to describe students' behavior and academic performance and to identify their strengths and needs. Such training would have several advantages. If teachers are able to pinpoint the nature of the difficulty, they will be better able to differentiate instruction and to design interventions to address presenting problems. Their assessment and progress monitoring data will be valuable to intervention assistance teams and/or to the referral committees that ultimately decide if the student should be assessed for special education.

Future Research Directions

The primary purpose of this study was to profile ELLs with LD who had been identified as having speech and language impairments before, at the same time as, or after they were identified as LD. However, information related to the SI identification process was limited and there were significant problems with the SI assessments. Because of these issues, the speech and language impairments of the 14 participants were not profiled. Given that SI is the second most common disability category in which ELLs are served (Zehler, et al., 2003), studies of the characteristics of this population are warranted. In addition to Spanish speakers, studies should include low incidence language groups.

Determining the characteristics of ELLs with reading-related LD requires that research be conducted in districts using best practices recommended in the literature (Klinger, Artiles & Barletta, 2006). This participating district offered bilingual education and bilingual special education programs and employed bilingual assessment personnel. Despite these services, serious problems were identified in the district's implementation of special education processes for ELLs. Future research should focus on identifying

practices that facilitate appropriate identification of ELLs with reading-related LD.

Similar studies in districts that serve ELLs in English as a second language programs, probably the most common type of service delivery (Zehler et al., 2003), are also needed.

Response to intervention (RTI) is touted as an alternative method for establishing LD eligibility (IDEIA 2004). The issues identified in this study have important implications for the implementation of RTI approaches with ELLs. RTI for ELLs will require that certain components be in place, including an effective core curriculum for limited English proficient students, a cadre of teachers who effectively implement the curriculum and who can differentiate instruction to meet the needs of struggling learners, and problem-solving teams with the requisite expertise to design increasingly intensive interventions for ELLs who continue to struggle despite classroom interventions (Garcia & Ortiz, 2009). The results of this study revealed numerous issues, including (a) limited evidence that teachers can assess language proficiency, communication skills, and achievement; (b) lack of progress monitoring; (c) failure to assure that interventions are timely, effectively implemented and that results are documented; and (d) limited evidence that problem-solving teams know how to design culturally and linguistically appropriate interventions. Unless the issues identified in this study are addressed, it is unlikely that RTI will be an effective vehicle for closing the achievement gap between ELLs and their English proficient peers, or that it will help resolve the disproportionate representation of ELLs in special education. Studies of RTI models and implementation strategies for ELLs is needed.

Conclusion

The issues presented in this study are similar to those reported in Wilkinson et al. (2006); Liu (2006); and Liu et al. (2008). While federal and state mandates governing services for students with speech and language impairments and/or learning disabilities have been in place for years, compliance with these mandates when students are ELLs has been challenging for school districts. This may be, in part, because law and policy offer little guidance as to how best to serve culturally and linguistically diverse learners (Ortiz, 2002; Wilkinson et al., 2006; Liu 2006; Liu et al, 2008). It is thus incumbent upon states and school districts to develop policies and procedures specific to ELLs that focus on prevention of problems, early intervention for struggling learners, and adaptation of special education processes to ensure that practices in these areas are culturally and linguistically relevant. Policy and practice should assure that schools provide programs and services conducive to the success of ELLs and that general education provides alternatives for students who continue to struggle, despite differentiation of instruction and increasingly intensive interventions. Moreover, all educators should share a common knowledge base about ELLs in relation to effective instruction, screening and progress-monitoring systems. Assessments and eligibility determinations must reflect best practices, including examining students' school trajectory longitudinally, correlating assessment results with referral concerns, and ensuring that data are available to address the exclusionary clause. Until such policies and procedures are in place, disproportionate representation of ELLs, both over- and under-identification, will continue to be an entrenched problem, and ELLs will continue to be denied educational opportunities to achieve their maximum potential.

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Footnote

¹The FIS research reported here was supported by the Grant #324C990048 from the U.S. Department of Education, Office of Special Education Programs. The views expressed here do not necessarily represent those of the funding agency.